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LESS WEEK
March 2

BusinessWeek

MARCH 2, 1992

A MCGRAW-HILL PUBLICATION

\$2.50

BIOTECH

AMERICA'S DREAM MACHINE

Investors are betting big on the promise of life-saving drugs, improved crops, and countless other advances. Is there hype? Sure. But scientists are starting to hit pay dirt. PAGE 66



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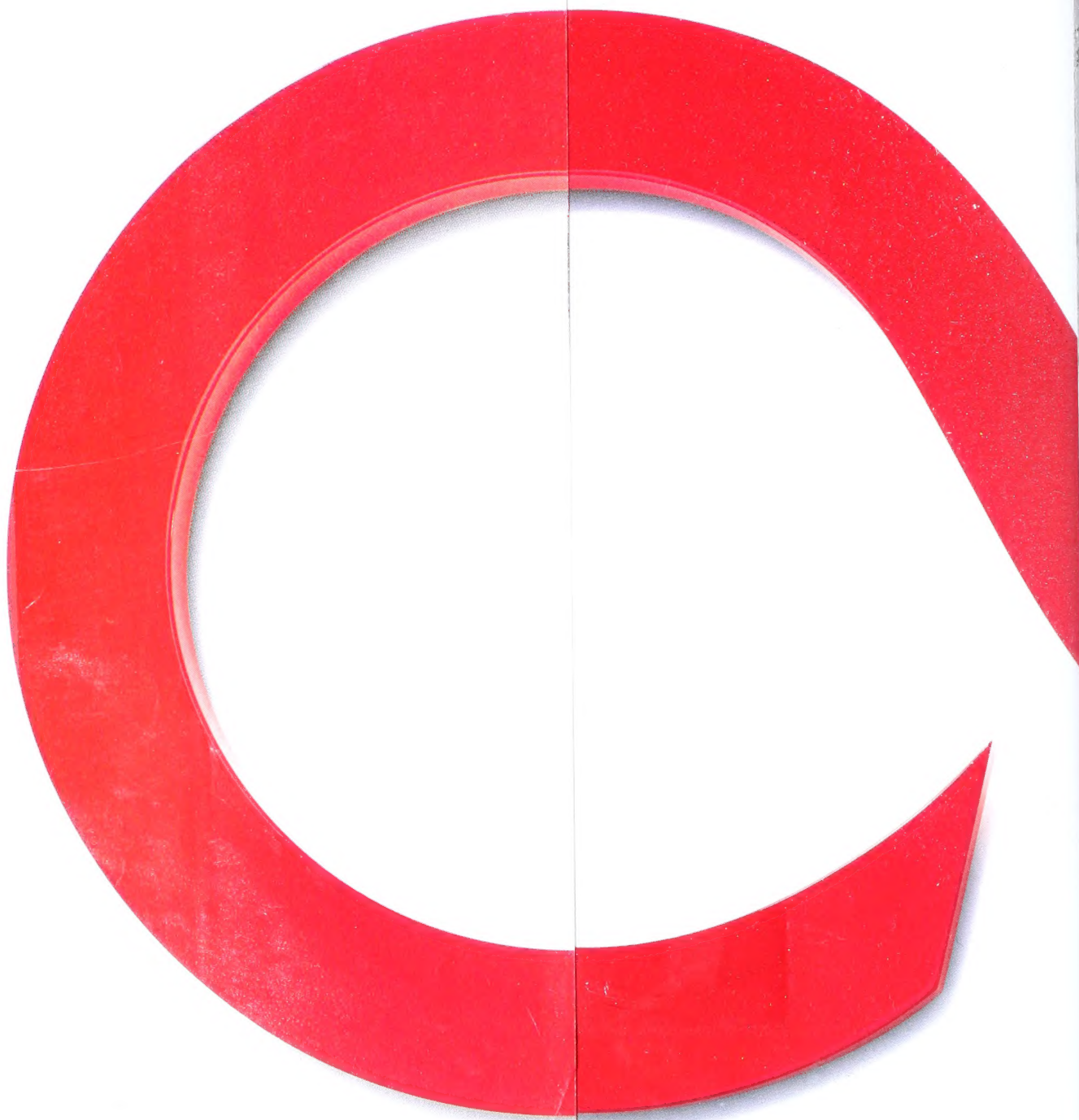
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PECHANEC

HOW A \$21 BILLION
TECHNOLOGICAL GIANT
MANAGES TO REMAIN
VIRTUALLY ANONYMOUS.



It's true we've
spent the last half century pushing the
envelope of technology harder than we've pushed our
name. ∞ Our commitment to R&D (over \$2 billion last year
alone) has helped make us the world's second largest computer
maker. And our advances in communications and microelectronics have
always taken priority over publicity. ∞ Today, our capabilities range from
hand-held computers to high-speed fiber optics. We make disk and
tape drives for many of America's leading computer manufacturers.
Transistors that made direct broadcast satellite systems possible.
And more of the application-specific ICs for modern computers
and electronics than anyone in the world. ∞ You'll find
our name in over 100 countries. Now we're
making a name for ourselves in
America.

∞
FUJITSU

COMPUTERS, COMMUNICATIONS, MICROELECTRONICS

The Subaru SVX

For
the sports
car
enthusiast
with lots
of
friends.

(Which explains why we're only making 12,000 of them.)



THE CLASSIC sports car enthusiast tends to be a solitary creature. That's because most of their free time is usually spent alone trying to repair their sports car and when they finally get it running there's often little room or comfort to take anyone along for a ride.

Which leads us directly to the new Subaru SVX.[™]

The Subaru SVX is a different type of sports car. For starters, it won't break down every other Thursday. It has room for more than one, possibly two emaciated adults. And it's also loaded with the comfort features and amenities you'd only expect from an obscenely-priced European luxury coupe.

Okay, let's begin with the reliability aspect of an SVX.

All we have to say is the SVX is a Subaru.[®] And 93% of all Subaru

cars registered in the last 10 years are still on the road and running today! (We like to think the other 7% are on blocks being stored as collectors items.)

How about the room for more than two starved adults?

Well, the SVX has roomy back and front seats and over 85 cubic feet of passenger space in all. That's enough room for four adults who haven't been on a diet in years.

Lastly, the life-improving amenities. The SVX has a sunroof. A soft grain leather interior. All-Wheel Drive. A 6-speaker CD player. A 4-Channel Anti-Lock Braking System. Driver's-side air bag. A patented noise-reducing window design. And you can buy a fully-loaded SVX now for well under \$30,000*, which, in the overpriced performance category, qualifies as a remarkable deal.

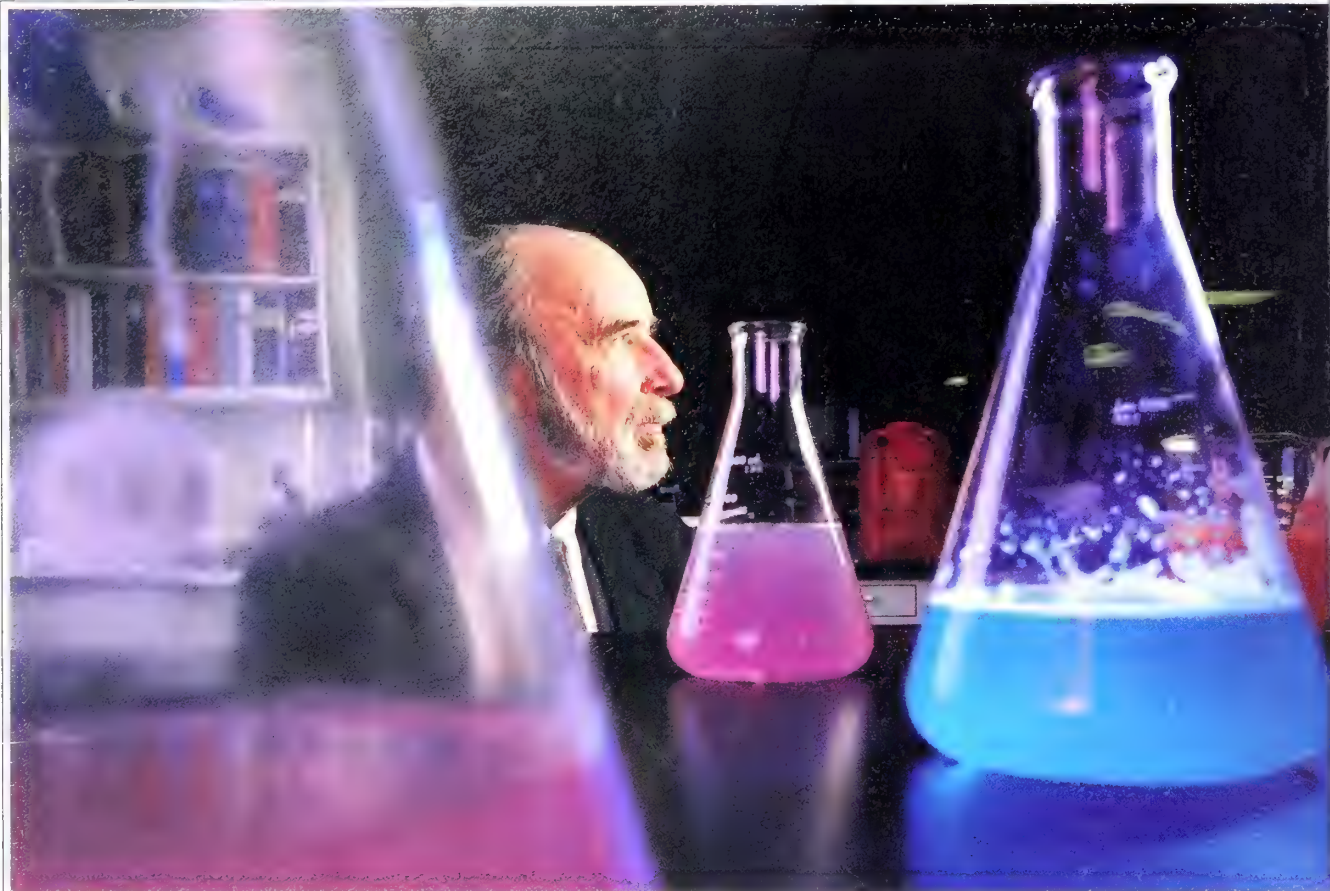
The limited edition 230 horsepower Subaru SVX. It's designed for those rare well-adjusted, socially-involved sports car aficionados.

Subaru SVX



Subaru. What to drive.[™]

¹ Based on R.L. Polk & Co., registration statistics. *Based on suggested retail price of \$28,350 for the SVX with optional Touring Package and Rear Deck Spoiler. Does not include dealer preparation, inland transportation, taxes, license and title fees. Dealer's actual price may vary. For additional information, 1-800-284-8584. See your participating dealer about the SVX Freedom Lease. © Subaru of America, 1991.



GEORGE RATHMAN, AMGEN FOUNDER AND CHAIRMAN OF STARTUP ICOS: "YOU NEED PEOPLE WHO SAY, 'WE'RE GONNA BUILD A BUSINESS' "

Cover Story

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The dazzling runup in biotech stocks is just part of it. Those startups with tongue-twisting names are raising huge amounts of capital almost effortlessly, enough to fund years of searching for cures to such scourges as arthritis, cancer, Alzheimer's, and AIDS. Biotech is an upstart no more. It seems likely to become the major growth industry of the '90s

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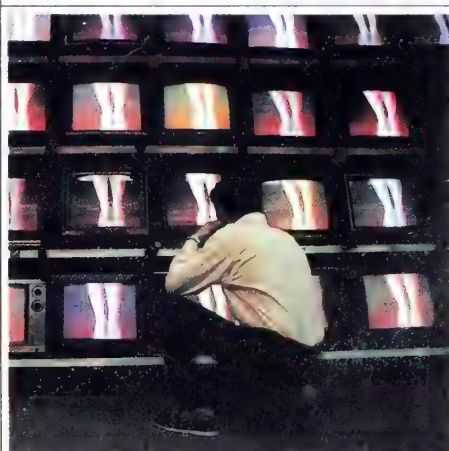
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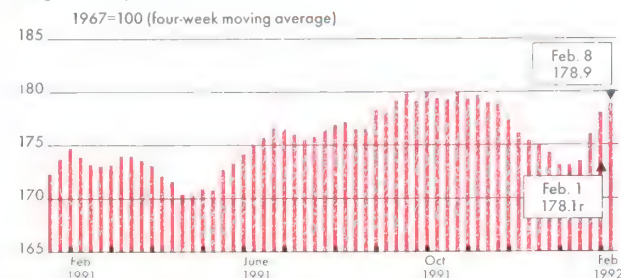
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Don't abandon artificial intelligence

BusinessWeek Index

PRODUCTION

Change from last week: 0.4%
Change from last year: 2.8%

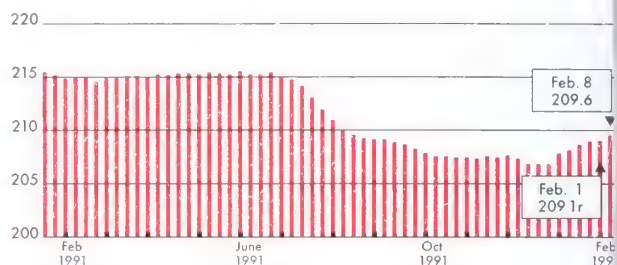


The production index advanced during the week ended Feb. 8. On a seasonally adjusted basis, output of steel and crude-oil refining rose, while coal, auto, and truck production declined. Output of lumber, electric power, and rail-freight traffic were all unchanged from the previous week, and data for paper and paperboard were unavailable. Prior to calculation of the four-week moving average, the index was little changed at 178.8, from 178.9.

BW production index copyright 1992 by McGraw-Hill Inc

LEADING

Change from last week: 0.2%
Change from last year: -2.5%



The leading index increased modestly during the week ended Feb. 8 and may be heading out of its recent trough. Higher stock prices and improvement in the growth rates for materials prices and real estate loans offset a large advance in the number of business failures and slower growth in M2. Bond yields were unchanged for the week. Before calculation of the four-week moving average, the index rose to 210.7 from 209.9 in the previous week.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (2/15) thous. of net tons	1,758	1,720#	8.1
AUTOS (2/15) units	111,301	106,632r#	36.4
TRUCKS (2/15) units	71,276	69,025r#	54.2
ELECTRIC POWER (2/15) millions of kilowatt-hours	57,695	57,052#	3.1
CRUDE-OIL REFINING (2/15) thous. of bbl./day	12,356	12,610#	-4.8
COAL (2/8) thous. of net tons	19,336#	19,521	-6.5
PAPERBOARD (2/8) thous. of tons	812.8#	806.5r	3.9
PAPER (2/8) thous. of tons	765.0#	760.0r	-1.7
LUMBER (2/8) millions of ft.	516.8#	521.8	5.8
RAIL FREIGHT (2/8) billions of ton-miles	21.0#	20.9	7.7

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA, SFPA, Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (2/19)	128	127	131
GERMAN MARK (2/19)	1.64	1.60	1.49
BRITISH POUND (2/19)	1.75	1.79	1.96
FRENCH FRANC (2/19)	5.59	5.46	5.07
CANADIAN DOLLAR (2/19)	1.19	1.18	1.15
SWISS FRANC (2/19)	1.49	1.43	1.27
MEXICAN PESO (2/19)	3,047	3,049	2,967

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (2/19) \$/troy oz.	353.200	357.200	-3.1
STEEL SCRAP (2/18) #1 heavy, \$/ton	89.50	89.50	-13.9
FOODSTUFFS (2/14) index, 1967=100	205.3	206.8	-1.9
COPPER (2/15) ¢/lb.	104.8	102.7	-9.1
ALUMINUM (2/15) ¢/lb.	58.0	56.2	-15.3
WHEAT (2/15) #2 hard, \$/bu.	4.59	4.67	66.9
COTTON (2/15) strict low middling 1-1/16 in., ¢/lb.	50.57	50.16	-34.1

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (2/14) S&P 500	414.17	412.43	12
CORPORATE BOND YIELD, Aaa (2/14)	8.25%	8.25%	5
INDUSTRIAL MATERIALS PRICES (2/14)	95.9	95.2	-0
BUSINESS FAILURES (2/7)	523	448	18
REAL ESTATE LOANS (2/5) billions	\$403.7	\$402.4	-1
MONEY SUPPLY, M2 (2/3) billions	\$3,442.7	\$3,447.4r	3
INITIAL CLAIMS, UNEMPLOYMENT (2/1) thous	437	450	4

Sources: Standard & Poor's, Moodys, Journal of Commerce (index: 1980=100), Dun Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBC seasonally just data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
CONSUMER PRICE INDEX (Jan.)	138.1	137.9	2
PRODUCER PRICE INDEX (Jan.) finished goods	121.7	122.1	-0
INDUSTRIAL PRODUCTION (Jan.) total index	106.7	107.6r	0
RETAIL SALES (Jan.) billions	\$153.5	\$152.7	3

Sources: BLS, Federal Reserve Board, Census Bureau

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (2/3)	\$921.7	\$915.2r	10
BANKS' BUSINESS LOANS (2/5)	290.8	288.7	-10
FREE RESERVES (2/5)	906r	782r	-64
NONFINANCIAL COMMERCIAL PAPER (2/5)	135.5	132.8	10

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (2/18)	4.81%	3.91%	6.26
PRIME (2/19)	6.50	6.50	9.00
COMMERCIAL PAPER 3-MONTH (2/18)	4.14	3.97	6.48
CERTIFICATES OF DEPOSIT 3-MONTH (2/19)	4.12	3.93	6.54
EURODOLLAR 3-MONTH (2/15)	3.91	4.03	6.49

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

A Few Examples Of What's Being Made In Mexico Today.

Investing in Mexico is truly a money-making proposition. Just ask a few of your competitors who have. Fortune 1000 companies in the appliance, electronic and automotive industries, to cite a few examples.

Companies in these and other industries are profiting from investments in one of the world's top-performing stock markets. And from direct investments in privatizations, low-cost production sharing plants and joint ventures.

So much so, in fact, that almost a full 65 percent of foreign capital invested in Mexico has come from corporations in the United States.

A significant portion of it from the clients of Banca Serfin. For as Mexico's most experienced international bank, no one has arranged more sales of state-owned industry. And no one can provide a better link to our country's fast-paced growth.

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For more information on investing in Mexico, call toll-free 1-800-336-7330 (U.S.); 1-800-336-6599 (Canada).



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Every year, over 5,000 American children are buried in unmarked graves. They are street kids—scared, abused, desperate—who struggle every day just to survive in a vicious and violent world. For these children Larkin Street Youth Center is a haven. A safe place to go for food, clothing, medical care and professional counseling. But most of all, it's hope.

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Do You Make These Six Common Mistakes On Your Taxes?

Six common mistakes can cause you big headaches on your taxes. An oversight here, an omission there. From unnecessary tax payments to full blown IRS audits -- you can end up paying too much ... or worse.

But now, using TurboTax and your personal computer, you can avoid these simple but costly mistakes:

1 The Arithmetic Error

Today, even the simplest forms contain complex calculations. And with all the late-night scrambling, an innocent mistake could cost you plenty.

2 The Transcription Error

With all those numbers being juggled from schedule to schedule, it's no wonder the figures are so often transcribed incorrectly or entered on the wrong line.

3 The Omitted Form

Even "ordinary" returns require anywhere from six to a dozen forms to complete. It's easy to miss one ... or end up rushing all over town to find the one you need.

4 The Misinterpreted Instruction

At best, IRS instructions can be tough to understand. At worst they can be mind-boggling. What you need are clear directions in plain English.

5 The Overlooked Deduction

You'd have to be a professional tax preparer to know all the deductions you're entitled to. If you miss just one, it could cost you hundreds of dollars.

6 The Exceeded Guideline

The fastest way to trigger an IRS audit is to exceed the "normal" range on one of your deductions. You need to know what the IRS looks for on a line-by-line basis.

When you do your taxes with TurboTax, mistakes like these are virtually impossible. And filing your taxes couldn't be easier.



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- B. Enter your data into TurboTax just once.
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TurboTax does the rest. Even if your records and receipts aren't in any particular order, TurboTax guides you through step-by-step

questions and shows how to enter every item. And like a good tax advisor, TurboTax helps you identify every deduction you can claim.

Then TurboTax makes all the calculations, checks for accuracy and consistency, and transfers every number to the proper lines on the proper forms. And, TurboTax prints every form you need in IRS-approved format right on your own printer -- ready to sign and mail (or file electronically, if you prefer, for a faster refund).

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HOW PRICE-CUTTING CAN PAY OFF

While we wholeheartedly endorse Procter & Gamble Co.'s plan to enhance its corporate training program ("Ready, aim, market: Combat training at P&G college," The Corporation, Feb. 3), we challenge Chairman Edwin L. Artzt's statement that "too much price discounting erodes the value of P&G brands."

As a 30-year marketing veteran, I've observed strategically planned, disciplined price-cutting promotions that did not destroy brand value. In fact, especially in recessionary times, many brands that lack advertising support are surviving on price and value-added programs. Price cutting, indeed, can successfully slow down a brand's market-share decline. Additionally, it can provide brand management time to restore or reposition a brand for future vitality.

The spend, spend mentality of the 1980s is behind us. And cost-conscious consumers are looking for value. Smart marketers such as McDonald's are using "value pricing" strategies to their advantage.

William A. Robinson
 Managing Partner
 Robinson & Maite Inc.
 Chicago

THE KEY PLAYERS IN GETTING PROLEUKIN APPROVED

Your article "Heartbreak and triumph in biotech land" (Top of the News, Feb. 3) creates a false impression about the process leading to the recent Food & Drug Administration Advisory Committee recommendation for approval of Proleukin (Interleukin-2) as a treatment for kidney cancer. In particular, the article incorrectly implies that Chiron Corp.'s "savvy" management somehow played a key role in the approval process.

In doing so, it slights the actual contributions of the highly professional and dedicated team of research and development scientists, pharmacologists, clinicians, managers, and supporting staff

from Cetus Corp., as well as the distinguished group of clinical investigators at the National Cancer Institute and other national cancer centers. Chiron management had virtually no role in the process leading up to the FDA Advisory Committee's review on Jan. 17.

Chiron senior management did not "re-submit" IL-2, nor did "the company orchestrate a more organized presentation" to the FDA panel. All of the data for Proleukin's review had been submitted to the FDA prior to the merger. Chiron simply encouraged the Cetus team to do its job.

The FDA presentation was given entirely by Cetus employees and their clinical investigators. A large dedicated support group within Cetus had been working for nearly a decade to make Proleukin available to kidney cancer patients, and it worked closely together and with the FDA over the past 18 months to generate additional data and analysis for a full review by the advisory committee.

Virtually all of this activity occurred prior to last month's Chiron-Cetus merger. During the meeting, a number of members of the advisory committee, including Dr. Jerome Groopman, complimented the quality, comprehensiveness, and clarity of the data and the presentations made by the FDA, Cetus Oncology, and the National Cancer Institute and other clinical investigators. Chiron's confidence in the ability of this Cetus team played a large role in Chiron's valuation of a merger between the two companies.

William J. Rutter
 Chairman
 Edward E. Penhoet
 Vice-Chairman and CEO
 Chiron Corp.
 Emeryville, Calif.

JEERS AND A CHEER FOR LESLIE WEXNER

I am a vice-president of marketing for a major textile company with a large number of our production facilities located in Georgia. My wife loves to shop at Leslie Wexner's The Limited and Victoria's Secret. However, because of his recent comments, she had better not shop there in the future ("Why Leslie

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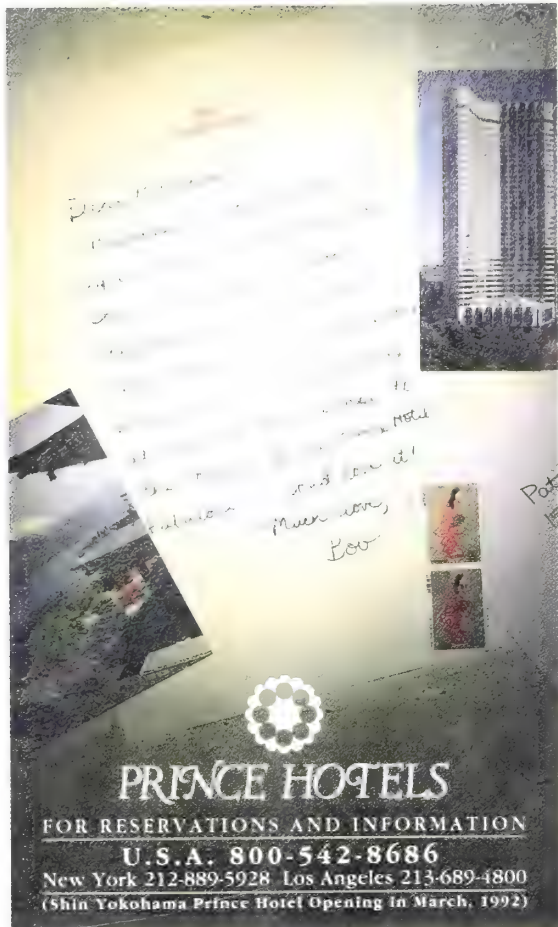


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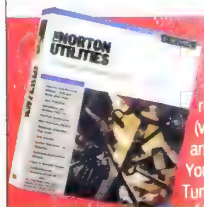
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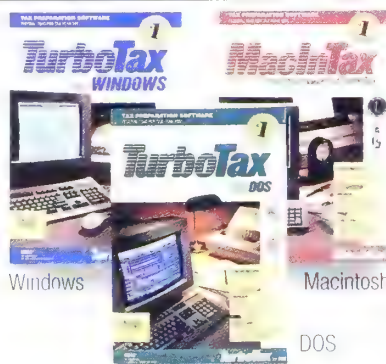
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Readers Report

CORRECTIONS & CLARIFICATIONS

In a story "Fear Stalks the Nikkei" (Finance, Feb. 3) we said erroneously that Japan's Tokai Bank Ltd. fails to meet internationally agreed-upon capital standards. According to the bank's 1991 interim financial statement, it maintains an 8.34% capital-adequacy ratio, above the 8% minimum ratio set by the Bank for International Settlements.

Wexner shops overseas," Top of the News, Feb. 3).

Our company is investing \$63 million in our current denim mill in Trion, Ga. This will be the largest denim mill in the world to our knowledge.

We will hire an additional 400 people. None of our people is overpaid, including me, but we have an 80% medical-dental-coverage plan, a pension plan, and a matching program for our 401(k). Wexner's part-time sales help sure doesn't. Given this, China's prison labor is hard to compete against for Wexner orders. We have also spent millions of dollars to ensure we protect our environment. In Wexner's foreign countries, such concerns or costs come into play.

William D. Havill
Greenville, S.C.

Leslie Wexner's claim that textile quotas and tariffs add an extra \$558 to the average household's annual clothing bill is ridiculous and misleading. According to the U.S. Census Bureau, there are 66 million families in the U.S. If you multiply that by Wexner's \$558, the so-called "hidden tax" on imports, it comes to \$36.8 billion. The total value of textile and apparel imports entering the U.S. in 1991 (including transportation and tariffs) was \$41 billion. Where does the extra \$36.8 billion cost come from? Could it be that the added cost to consumers he complains about is in reality the huge markup he and others make on their imports?

Carlos Moon
Executive Vice-President
American Textile Manufacturers
Institute
Washington

Instead of complaining about rapid increases in textile imports, U.S. mills should be asking themselves why U.S. companies must go outside their own borders for goods. The U.S. manufacturing industry cannot expect tariffs and quotas to continue to correct its mistakes. These bailouts just perpetuate uncompetitive industries and penalize efficient producers. This seems to be a poor

empt at trying to assure competitive-
ss, with domestic consumers footing
e bill. Have we forgotten that coun-
es are different and that the aim of
de is to allow economies to specialize,
ereby producing goods for the lowest
ssible cost? If the welfare of consum-
is truly the supreme concern, this in
utshell will raise standards of living.

Linda S. Chaffin
Chicago

INDONESIANS ARE CRAZY ABOUT AMERICA—WHY NOT ITS CARS?

The articles "The Asia America is ig-
noring" (Editorials, Jan. 20) and
"When will Bush stop thinking small on
Japan?" (Top of the News, Jan. 20) were
ht on target. We were overwhelmed
a visit to Indonesia by the dominance
Japanese vehicles on the overcrowded
highways in that country and the lack of
presentation by the U.S.

We found the people in Indonesia to
be fascinated with America, and they
are very curious about all aspects of
our lives.

It is American music you hear every-
where, American clothes are worn by
everyone, and schoolchildren stop you on
the street to practice their English. An
ambition of almost everyone we spoke to
was to visit America, particularly Cali-
fornia. Why, then, would they not want
our cars?

William and Beverly Webster
Bakersfield, Calif.

LANIER IS NOT PROBLEM CHILD

I want to clarify some of the informa-
tion in your article "Harris is looking
sharp in civvies" (Top of the News, Jan.
1). Lanier Worldwide, a wholly-owned
subsidiary of Harris Corp., was said to
"... giving Harris fits." This was mis-
leading and in no way reflects Lanier's
strong performance during these tough
economic times. Despite the U.S. and
international recession, Lanier earned
more than \$33 million in fiscal 1991, on a
12% return on sales. In the last two
years, Lanier has earned more than \$75
million in profit. Most recently, Lanier's
Engineering Systems Div. achieved record
venues and profit in the second quar-
ter. This was based on 11% U.S. growth,
well above the industry average.

Wesley E. Cantrell
President/CEO
Lanier Worldwide Inc.
Atlanta

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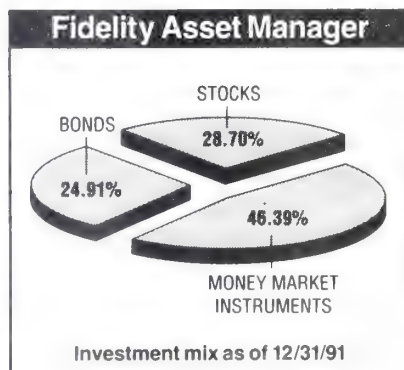
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INVENTING JAPAN

By William Chapman
 Prentice Hall • 307pp • \$22

PACIFIC RIFT

By Michael Lewis
 Norton • 144pp • \$14.95

ZAIBATSU AMERICA

By Robert L. Kearns
 Free Press • 256pp • \$22.95

JAPAN IS: A) ADRIFT, B) FUNNY, C) SCARY?

The U.S. debate about Japan is exploding. Americans are groping to understand this key ally and fierce competitor. Three new books attempt to unravel who the Japanese really are—and what they're up to.

It is a peculiar paradox: A seasoned Japan hand is confused; a neophyte sees the Japanese clearly.

Inventing Japan, by William Chapman, former Tokyo bureau chief for *The Washington Post*, impresses at first with its detailed grasp of Japan's postwar history, including the U.S. occupation. His thesis: The nation underwent a "fundamental change" in the cultural and economic model that many blamed for Japan's aggression. Thus, Japan's "earlier history and culture," he claims, "had little to do" with its postwar success.

His assertion goes to the heart of the decades-old debate about whether Japan is becoming more like "us," or whether it remains culturally and economically distinct.

Chapman says the former is true, but he constantly undermines himself. After stating that the occupation created a new Japan, he shows how the American plan was undone. Yes, labor demands blossomed. But, as he concedes, they were later squelched. Yes, the Americans tried to break up *zaibatsu*, the business groups that fueled prewar expansion. But, he notes, they were reconstituted in slightly altered form as *keiretsu*. There was change: The emperor's role was reduced, and military power curbed. But it is preposterous to argue, as does Chapman, that Japan has forgotten its culture of 2,000 years or its century-old desire to catch up with and surpass the West.

Chapman's conclusion is especially unsatisfying. Japan is "adrift," he says. Some Japanese want to challenge the all-consuming business culture, but lack a vision for how to do it. Gripped "with a peculiar paralysis of political will," Japan cannot define a geopolitical role commensurate with its economic power.

But there's another explanation. The Japanese don't seek the geopolitical role

Chapman would prescribe. They define their power as economic, and that power they have in abundance. Having spent \$3 trillion on plant and equipment in the past five years, they will likely sustain their economic prowess well into the next century. As they are increasingly candid in saying, their values and systems are triumphing.

This book represents a misguided school of thought that has fed deep confusion about Japan. As the *Post's* man in Tokyo for 14 years, Chapman influenced not only other journalists

even internal competition. When Americans develop and register a product, the bureaucrats tell Japanese rivals about it, so everyone's market share is preserved. "The barriers don't exist specifically to exclude foreigners," Lewis writes, "but to preserve the status quo."

Lewis' best material concerns the Japanese in America. We see Shuji Tomikawa, a Mitsui executive, peering through his sunroof at the skyscraper he wants to buy. He's the sort of young affluent Japanese that Chapman might expect to rebel against the Japanese system. Yet he is a player in a "zaibatsu turf war"—fought in New York. In 1986, Mitsui bought the Exxon building and soon after, Sumitomo bought 60 Fifth Ave. To save face, Mitsubishi had to make a major purchase. With Mitsui circling Rockefeller Center, Mitsubishi offered \$846 million, overpaying dearly.

Why? Maintaining prestige is key, Lewis explains, to attracting top talent

Chapman is
 wrongheaded. Lewis
 stumbles on truth.
 Kearns warns of
 a tenant nation



but official Washington as well.

Michael Lewis, by contrast, is no Japan expert. Indeed, in *Pacific Rift*, Lewis (of *Liar's Poker* fame) says he set out to answer some "stupid questions." If so, they are questions millions of Americans ask: Why does Japan persist in piling up huge surpluses? Why such misunderstanding between the two peoples?

This slim volume (which was sent to executives and other "opinion makers" as a Whittle "direct book" last year and will be published by W.W. Norton & Co. in April) depends on a simple device: Lewis spends time with American insurance executives in Japan, then travels with a Japanese real estate executive in Manhattan. In his customary wry style, he stumbles on many truths.

Executives at American International Group Inc., for example, find Japan's omnipotent bureaucrats more interested in maintaining stability than in fostering

from Japanese universities. These graduates have buddies who will go on to run the Japanese bureaucracy, and such connections will let them make killings in Japanese real estate. Mitsubishi's purchases reflect this distinctly Japanese rivalry.

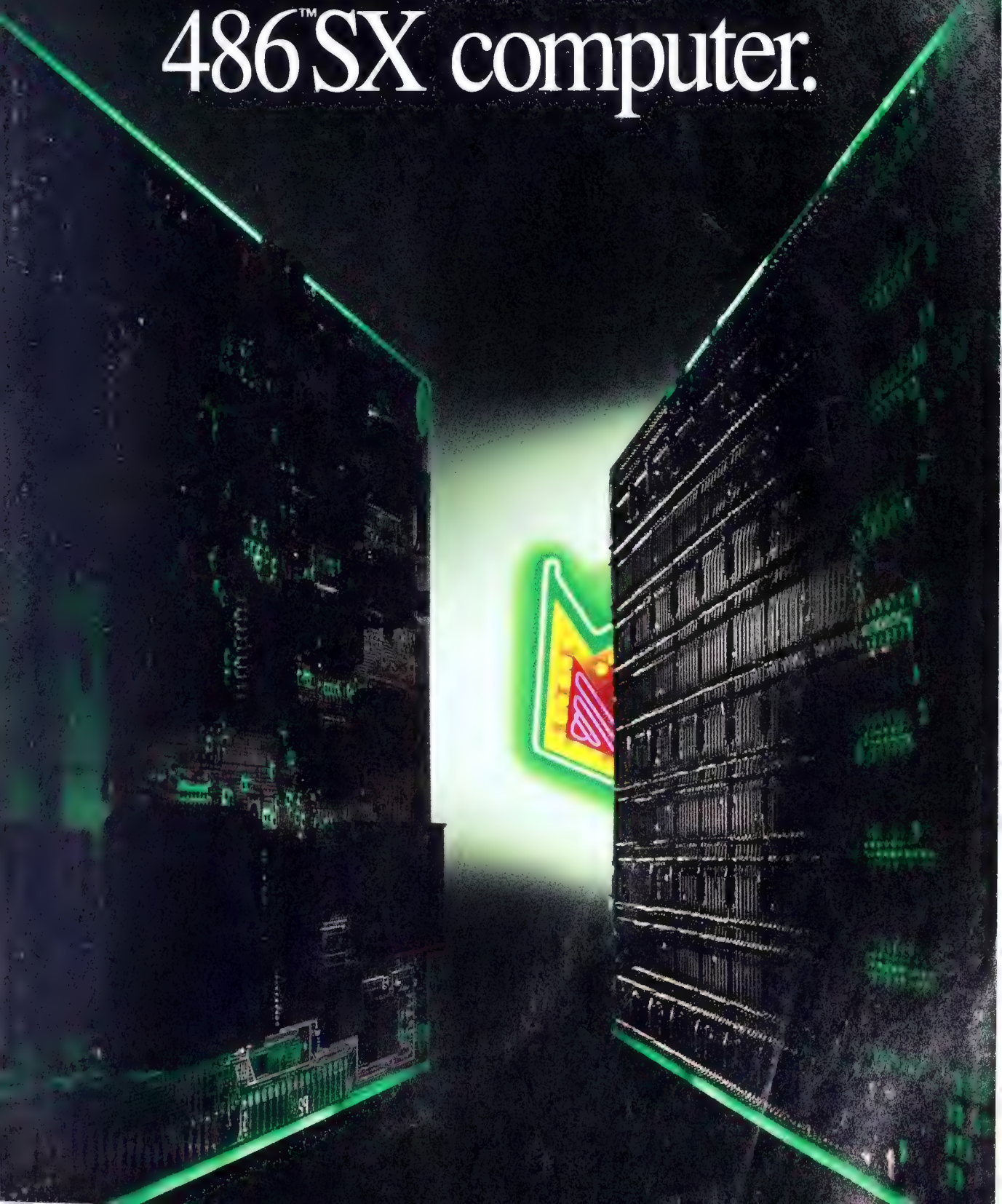
Lewis' take on all this is often comical but his message is serious. He sees Japan as it is and sums up the challenge: "How can our capitalism beat their capitalism?" By keeping his eyes open and asking the right questions, this newcomer comes up with penetrating insights.

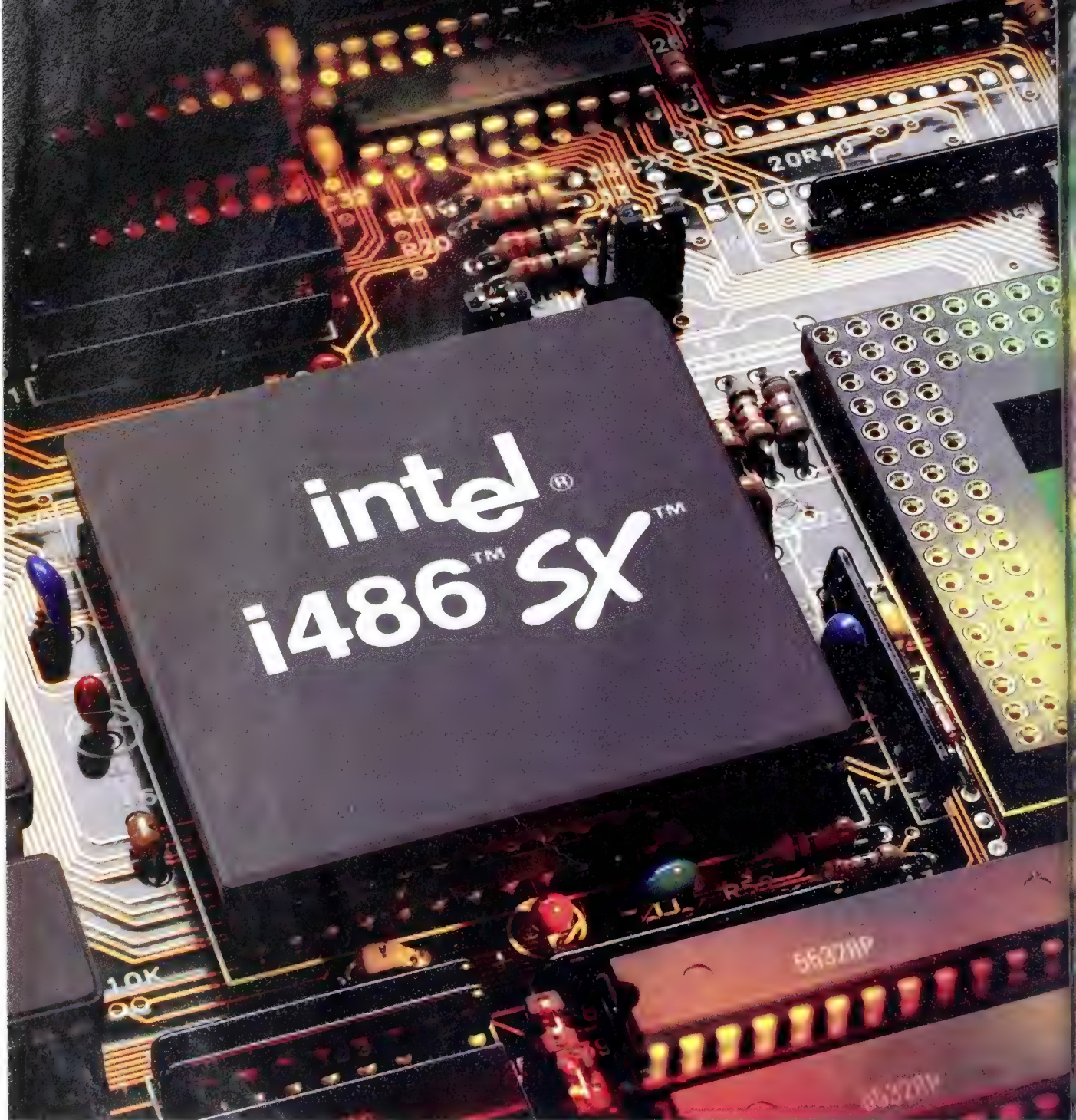
BY WILLIAM J. HOLSTEIN

Holstein is author of The Japanese Power Game: What It Means for America.

In the otherwise-forgettable movie *Freejack*, set in the early 21st century, Japanese businessmen swarm over Battery Park, Manhattan's last habitable spot, apparently intent on owning everything. A U.S. executive speaks

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ruefully of the golden era "before we lost the trade war." In *Zaibatsu America*, Robert L. Kearns tells us we are in fact well on our way to becoming an economic colony of Japan.

Kearns, a former *Chicago Tribune* reporter, pulls his evidence from the business pages: Sony has CBS Records and Columbia Pictures; Matsushita, MCA Television and Universal Pictures; Mitsubishi, Rockefeller Center; and Minoru Isutani, the Pebble Beach golf course.

Understand, economic traditionalists maintain that's O.K. Many developed nations—though not Japan—have higher percentages of direct foreign ownership, and Britain remains the largest investor in the U.S. economy. Foreign investment supplies U.S. companies with needed capital and creates jobs. But Kearns is troubled by Japanese investment in particular.

First, there's the scale. Japanese have been buying U.S. assets faster than anyone else. In 1990, they out-invested the British \$20.5 billion to \$13.1 billion, according to the Commerce Dept. Japan has replaced the U.S. as the country with the most net foreign assets and is the world's largest lender, Kearns notes.

Then there's the mix. Japanese invest-

ment, says Kearns, is aimed at America's brain and heart—its financial institutions, its high-tech manufacturing base, its entertainment industry. In his view, Japanese money isn't seeking maximum return; it's seeking dominance. Japan is buying up the companies that make the machines used to manufacture semiconductors, for example, and targeting emerging U.S. technologies.

Why should Japan 'strive to give American firms better access to Japanese markets'?

Last, there's Japan's method—the "zaibatsu behemoth." Japan's interlocking corporate networks, says Kearns, are using cheap capital, secrecy, and political influence to take over U.S. technology and finance. Meanwhile, Japan's economy is largely shielded from foreign investors and even from outside competition in many high-tech businesses.

Kearns fears that the *zaibatsu* sys-

tem, unchecked, could turn America into tenant laborers in a Japanese-owned economy. But many of his proposed remedies, such as the creation of a U. Trade Dept. and yet another committee to monitor foreign investment, are weak. Others are obvious: better education, balanced federal budget, an end to state tax rebates to draw foreign investment.

His suggestions for Japan are also uninspired. Why should Japan, as he urges, "abandon its narcissistic, insular way and strive to give Americans better access to Japanese markets?" To forestall protectionism? That's a key reason Japan is investing so rapidly in U.S.-based production. In the end, Kearns says, perhaps the U.S. should scrap its antitrust laws and adopt the *zaibatsu* system.

Kearns writes well, if a bit breathlessly (the Japanese threat is always "scary"). But his book is oddly dated—much of his auto data are from the late 1980s. And more interviews with experts on the Japanese system would have added depth. Still, for those seeking a readable summary of Japan's global investment strategy, *Zaibatsu* does the job.

BY PAUL MAGNUSSON

Magnusson reports on trade and industrial policy from Washington.

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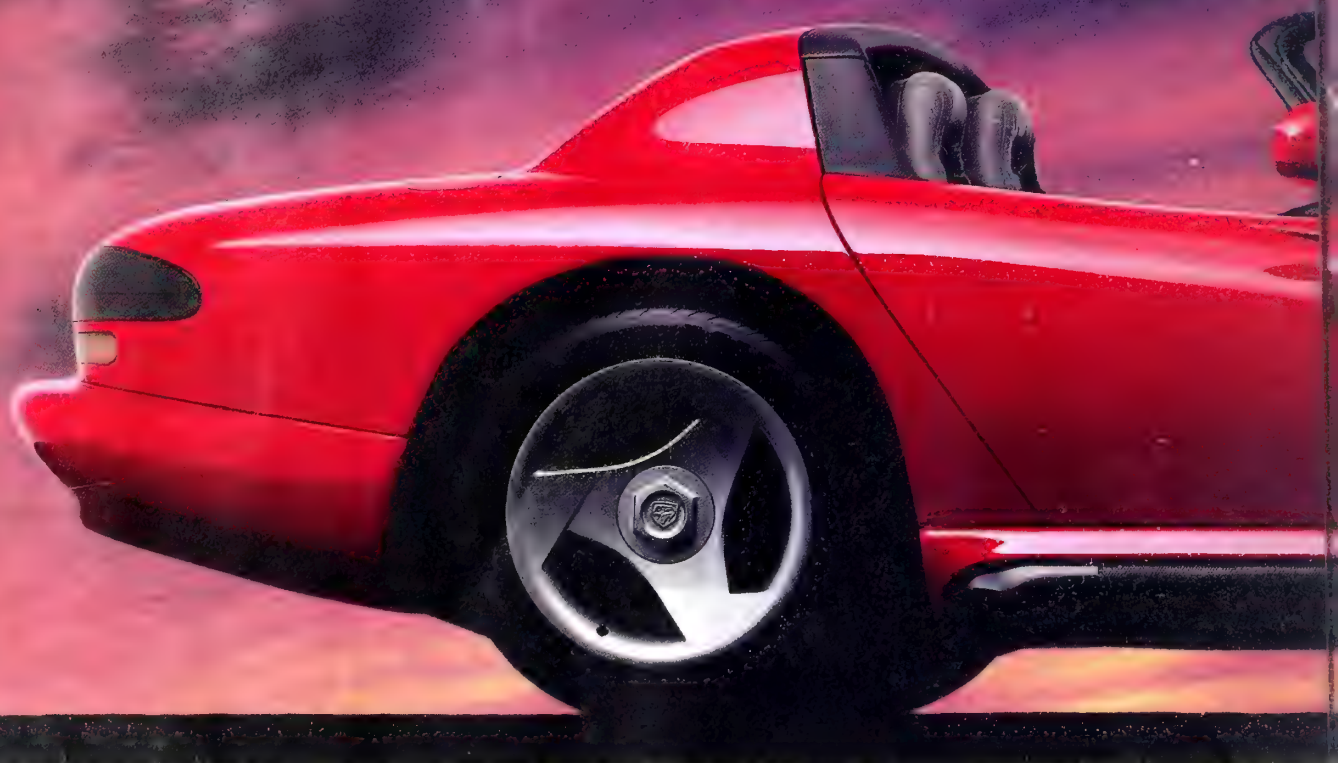
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THE PROBLEM IS NOT WHAT CEOs GET —IT'S GETTING THEM TO GO

BY GARY S. BECKER



Fixed terms might not be a surefire remedy for bad management, but they would mean regular, systematic reviews of performance that would help expose incompetence

The recession and President Bush's trip to Japan with a cohort of highly paid CEOs focused the attention of both sides of the Pacific on huge executive paychecks. Although some business leaders are surely overpaid, I believe pay is a red herring. The main problem with corporate leadership—and hence competitiveness—is the difficulty in getting rid of CEOs who run their businesses badly. The best way to do that would be to give them fixed-term contracts.

Chief executives who perform poorly are hard to replace because they usually have indefinite tenure, subject only to the board of directors or the grim reaper. But CEOs control most board appointments and thus are protected against removal. Management's slate is unopposed in more than 99% of elections to boards of directors, and even in the small remainder of cases, management prevails over the opposition 75% of the time. The upshot is that, barring a takeover by another company, top management seldom is fired, even when the company does badly.

Legislators, governors, college deans, coaches of college and professional sports teams, and others make do with term appointments. It might be a good idea for college professors, too. And it would be better to replace the tenure of chief executives by a fixed-term contract, perhaps three to five years, which could be renewed. Prior to renewal, the board would evaluate performance—preferably with the help of outside consultants—and report its conclusions and some of their analyses to the shareholders.

The short-term contract wouldn't be a surefire remedy for bad management, since the CEO would continue to exercise much control over the board. Still, it would involve a systematic, regular review of performance that would help expose evidence of incompetent management to stockholders and workers.

HEAL THYSELF. I am not advocating that fixed terms be imposed by the Securities & Exchange Commission or an act of Congress: There is already too much federal regulation of corporate governance. Rather, I would like to see corporate boards take the initiative in providing fixed terms for CEOs, possibly in response to stockholder and public pressure. The performance of these companies could then be studied to determine whether term appointments really are a good idea.

Critics complain that executive pay usually does not fall much when a company's profits and stock plummet. But even though a hefty pay cut for top executives of a loss-making company might make shareholders happy and might improve the morale of employees who

suffer losses in pay and jobs, it would have much direct effect on profits, since executive pay usually is a minute fraction of total costs. And tying compensation more closely to performance would not magically cause an executive to make better decisions, if possible, however, that linking pay closely to performance would attract more entrepreneurial executives to corporations.

The proposal by Governor Bill Clinton of Arkansas and some members of Congress to penalize a company that pays top executives more than a specified multiple of the earnings of the average worker would be an unwarranted intervention into the market. The issue it turns on—the relationship between executive and average pay—strikes a popular note but isn't particularly important. The same is true of the recent recommendation by the SEC that companies allow stockholders to vote on executive compensation, though their vote would not be binding.

A study by economist Steven N. Kaplan of the University of Chicago of top executives of large Japanese and U.S. companies indicates that the heads of Japanese companies appear to earn much less, yet their compensation is no more sensitive to performance than is the pay of American leaders. But Japanese CEOs typically serve for only 6 years, compared with almost 10 for Americans. This is because Japanese executives are older when they reach the top, and they are more likely to be forced out by poor stock performance and low profits. **LEADEN PARACHUTES.** It is far more common in the U.S. than elsewhere to replace top management through friendly or hostile takeover. Obviously, takeover battles are an uneconomical way to replace bad management. A much criticized but more economic method of replacing a CEO is to convert an unfriendly takeover into a cheaper friendly one through golden parachutes: liberal severance pay for top executives who are forced out.

It may be unfair to reward a bad CEO with a multimillion-dollar payoff. Yet under present conditions, that's often the cheapest, quietest, and most effective way to get rid of him and replace deeply entrenched management without a bruising fight. Clearly, fixed-term appointments would make it easier to oust incompetent CEOs more rapidly without takeover battles and golden parachutes.

Only bad leaders fail to cut their own pay when workers and stockholders are asked to sacrifice. But the poor performance of a corporation has less to do with executive pay than with the old problem of how to make change at the top when leaders do not perform well.

GARY S. BECKER IS UNIVERSITY PROFESSOR OF ECONOMICS AND SOCIOLOGY AT THE UNIVERSITY OF CHICAGO

Nightmare Scenario #2

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A lot of executives go pale when they see how much their computer networks are really costing them.

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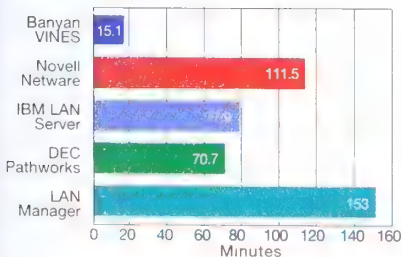
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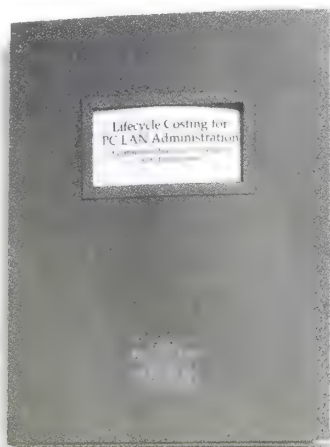


Business Research Group/Newton, MA bc16D

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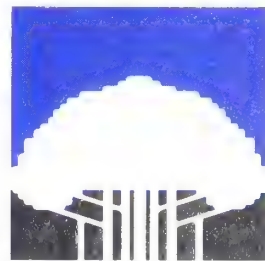
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BY GENE KORETZ

WILL SLUMPS OVERSEAS DRAG DOWN A U.S. RECOVERY?

To the gratification of economic observers who have been trumpeting the growing competitiveness of U.S. products in world markets, the most dynamic sector of the economy in the recessionary climate of the past 18 months has been merchandise exports. Despite relatively weak economic growth overseas, U.S. companies managed to rack up a 10% rise in real exports in 1991.

Whether that performance can continue, however, is the question haunting the Bush Administration. While exports helped limit the severity of the recession, they could well prove to be the Achilles' heel of the economy in the months ahead. "Without continuing

The slowdown is being exacerbated by a hard-nosed attitude by central banks overseas. Nakagama points out that recent high wage settlements in Germany's steel industry seem to have strengthened the Bundesbank's resolve to short-circuit a wage-price spiral. Similarly, monetary restraint by Japanese authorities seeking to quell excessive inflation in land and property values has already pushed housing starts, industrial production, and corporate capital spending plans into steep declines, making it "extremely likely" that Japan will undergo at least one quarter of shrinkage, says Nakagama.

Because of Germany's critical role in Europe, and Japan's in the Pacific Rim, Nakagama thinks their economic woes will inevitably affect their neighbors, undercutting America's export performance even more. And economist Richard F. Hokenson of Donaldson, Lufkin & Jenrette Securities Corp. notes that the 1991 surge in exports reflected orders placed in the last half of 1990, when the dollar was weak and overseas economies were still relatively strong. By contrast, the current strength of the dollar, he says, "will reinforce the inhibiting effect of growing economic sluggishness overseas on export demand."

"Exports," warns PaineWebber's Harris, "are the wild card in the economic outlook. If they actually decline, the recovery could run out of steam again."

BAD DATA CAN LEAD TO BAD FORECASTS—AND GRIM RESULTS

The welter of economic statistics that emanate from Washington each month provide vital information to business and the public. But because many such initial reports are based on incomplete data and subject to heavy revision, they inevitably entail a risk that economic decisions will be based on faulty information. And if a protracted series of reports are biased in one direction, the impact on the economy could be substantial.

That, in fact, is exactly what seems to have occurred in the period prior to the start of the current recession, according to economists Michael Waldman of Cornell University and Seonghwan Oh of the University of California at Los Angeles. The two researchers examined the impact of a string of eight erroneous leading indicator reports, starting in January, 1989, that proved to be too low after final revisions were in.

Waldman and Oh found that these reports had a significant effect on the

views of economic forecasters, accounting for a quarter of the shifts in the monthly forecasts. More important, the econometric model shows that the reports had a substantial impact on level of manufacturing output two four quarters after they were issued.

Specifically, the economists estimate that factory output in the third quarter of 1990, when the current recession began, was some \$10 billion lower than it would have been if the reports issued in 1989 had been accurate. "Although the damage to economic perception caused by faulty initial reports may not have been enough to tip the economy into recession," says Waldman, "it clearly worsened the downturn."

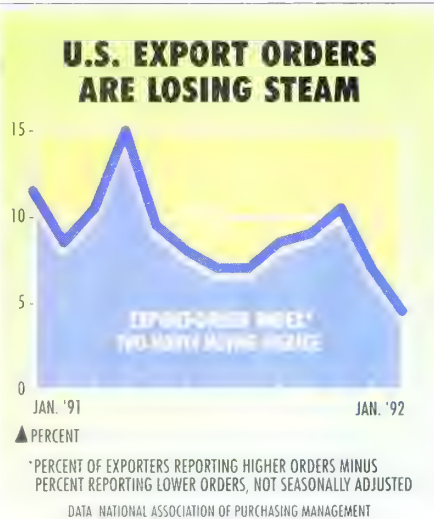
WHERE THE HOUSING TAX CREDIT MAY REALLY SHORE THINGS UP

President Bush's proposed \$5,000 tax credit for first-time homebuyers is likely to be most welcome in the South and Midwest, says economist David Resler of Nomura Securities International Inc. That's because home prices and incomes are a lot lower in those regions than in the Northeast and West.

Resler estimates, for example, that the \$5,000 credit would be equal to nearly 40% of the required downpayment on an average-priced home bought by a typical first-time buyer in the Midwest as compared to 20% of the required downpayment of a starter home in the West. And for the Midwestern family whose income is just high enough to buy a starter home, the \$2,500 credit (the part available in 1992) would cover more than 200% of its federal tax liability, with such credits permitted to be carried forward for several years.

BUSH'S BUDGET COULD DELIVER A SHARP JOLT TO GROWTH

How much fiscal stimulus is there in this year's federal budget? Economist Edward S. Hyman of International Strategy & Investment Group Inc. says that the Office of Management & Budget is projecting a 12% rise in spending (not counting outlays for the thrift bailout). Assuming real spending grows by 8%, Hyman figures that's enough to lift gross domestic product by 2% all by itself. "Add tax cuts, faster money growth, lean inventories, and some nice spring weather, and we could see a strong pickup than expected," he says.



strength in exports," says economist Sam Nakagama of Nakagama & Wallace Inc., "the coming recovery will be anemic at best."

One development clouding the outlook for U.S. exports is an apparent deterioration in export demand. Economist Maury N. Harris of PaineWebber Inc. points out that export order growth, as measured by order trends reported in the monthly survey of the National Association of Purchasing Management, recently hit its lowest two-month level in several years.

Meanwhile, foreign economies are slowing. Canada's economy has apparently slipped back into recession, while Britain's is still mired in a downturn, and Germany has just announced its third consecutive quarterly decline in GNP. Even Japan has posted less than 2% growth over the past half year.



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THE BOND MARKET IS TURNING INTO THE VILLAIN OF THE PIECE

The 1992 recovery has made an enemy: the bond market. Even the slightest hint of a rebound sends traders into a selling frenzy that pushes up long-term interest rates. As a result, long rates have surged back toward levels that are putting a choke hold on an economy that's struggling to get back on its feet. Lower long rates are the heart of the recovery mechanism. They give life to the upturns in housing and related industries, and they are critical to consumers and businesses that need to refinance heavy debts and thus put themselves into better shape to spend. But by mid-February, the rate on 30-year Treasury bonds had risen back to where it was in November (chart).

The bond market's hostilities were evident when it reacted to only a moderate gain in January retail sales as if the numbers were ushering in a consumer-led boom. The market ignored the downbeat implications for jobs and incomes contained in the January employment report, the plunge in industrial output, and the absence of inflationary pressures implied by falling producer prices and a slim gain in consumer prices. The bond market is pushing rates up mainly out of fear that an economic recovery will coincide with what promises to be the largest Treasury-financing needs ever. In addition to the credit demands of a growing economy, a \$400 billion federal deficit would mean that the government would be in the credit markets during the third quarter to borrow a staggering \$3 billion a day. And Congress hasn't had its say on the 1993 budget.

For banks, a boost in the value of their assets could be stronger than expected and fuel inflation. The Fed's action boosts banks' profitability by freeing up \$9 billion in reserves that now can be invested in securities or used to make new loans. And down the road, new lending will help the economy. For now, though, the Fed's move looks more political than tactical, since it came the day before Chairman Alan Greenspan went to Capitol Hill to deliver his semi-annual defense of monetary policy. The cut in the re-

serve requirement helped Greenspan dodge political pressure without cutting short-term interest rates. In fact, the move seems to underscore the Fed's recent aversion to further rate cuts. The Fed seems to be betting that past cuts are enough to spark an upturn.

Indeed, in his Feb. 19 testimony, Greenspan reiterated his belief that a "moderate" recovery would begin in the second quarter. For 1992, the Fed expects real gross domestic product to grow between 1.75% and 2.5%.

The chairman sounded especially upbeat on inflation. The Fed projects consumer prices will rise between 3% and 3.5% this year, and Greenspan expressed optimism for further improvement in 1993 and beyond "even as the economy expands." The chairman's comments seemed to be aimed at calming the jittery bond market.

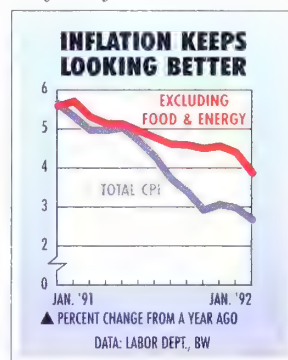
To be sure, higher rates are a direct threat to the housing recovery, which is much more muted than January's 5.5% increase in housing starts, to 1.17 million, suggests. A big increase in starts of apartment buildings in the Midwest accounted for much of that gain. Starts in the much larger single-family sector rose only 0.9%. If mortgage rates rise above 9%, the longevity of this already modest housing upturn will be at risk.

Not even the impressive improvement in inflation has swayed the bond bears. Producer prices of finished goods fell 0.3% in January, the second consecutive decline, and consumer prices rose a scant 0.1%. During the past year, inflation at the consumer level has fallen to 2.6%, from 5.6% a year ago, largely because of falling energy prices. Even excluding energy and food, however, the core rate has dipped from 5.6% to 3.9%, the lowest in nearly five years (chart).

CONSUMERS DUST OFF THEIR WALLETS If the bond market is hypersensitive to a recovery, it is at least focusing its attention in the right place. It knows that consumers have to lead the upturn. A few household fundamentals have stabilized, but the necessary improvement in those supports still is lacking.

Some glimmerings: The University of Michigan's index of consumer sentiment edged up in early February. And new filings for jobless benefits have plateaued, suggesting that the labor markets have stopped deteriorating.

With those signs, bond traders latched onto the latest



FOR BANKS, A BOOST IN THE VALUE OF THEIR ASSETS The Federal Reserve didn't help matters on Feb. 18, when it cut the reserve requirement on bank deposits from 12% to 10%, effective on Apr. 2. The move is a moderate easing of monetary policy, and it further cooled the bond market by raising fears that the recovery could be stronger than expected and fuel inflation. The Fed's action boosts banks' profitability by freeing up \$9 billion in reserves that now can be invested in securities or used to make new loans. And down the road, new lending will help the economy.

For now, though, the Fed's move looks more political than tactical, since it came the day before Chairman Alan Greenspan went to Capitol Hill to deliver his semi-annual defense of monetary policy. The cut in the re-

Business Outlook

retail data as evidence of the recovery's arrival. Retail sales rose 0.6% in January, and revisions showed that November and December weren't as disastrous as first measured (chart). January sales at department and building-materials stores were especially strong.

Consumers started February on a stronger note, as well. New domestic-made cars sold at a good, though not spectacular, 6.4 million annual rate in early February. That's up from 5.9 million for all of January.

LOWER MORTGAGE COSTS HELP SPENDING

The problem is that rising interest rates and no growth in jobs or incomes may knock consumers out of the box. Indeed, jobs shrank by 91,000 in January, and weekly pay fell a sharp 0.7%. So where did consumers get the money for their January shopping spree?

The answer seems to be from mortgage refinancings. Applications for refinancings soared in January, as the mortgage rates dipped to nearly 8%. That liberated cash for many homeowners. Some of the money repaid old debts, but the rest was probably spent.

The danger now is that the bond market has closed the window of opportunity for consumers to lower their mortgage payments. The average 30-year mortgage rate has ticked up by half a percentage point in five weeks, to 8.8% by Feb. 14. Not surprisingly, applications for refinancings fell sharply in the final week of January and the first week of February.

That means shopping malls that were crowded in January could be emptier in later months. As it is, even with the increase in January, retail sales started the first quarter only about even with their average in the fourth quarter, after adjusting for inflation. The prognosis: Labor

markets will have to improve, or consumers will have the additional income to boost spending.

That's why the double dip in manufacturing dims the outlook. Industrial output plunged 0.9% in January, after cuts in November and December (chart). Operating rates for all industry fell from 78.8% in December to 78% in January—the lowest rate in 7½ years. Output cuts in mothballed equipment mean workers will not be added.

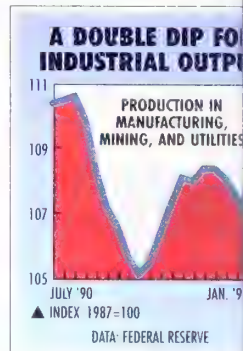
Factory output fell 1% in January, led by a dizzy 8.2% drop in auto production. But even outside the auto industry, production was down 0.6%. The defense industry was a big loser, but there also were declines in industrial machinery, oil and gas equipment, and materials. That reflects the sluggishness in new orders, and inventory troubles, especially at retailers.

Business inventories rose by 0.4% in December, but factory stockpiles shrank by 0.5%, the 10th drawdown in a year. Retailers, however, saw inventories balloon by a large 1.2%, their sixth consecutive increase.

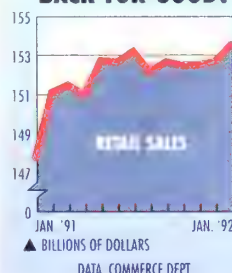
Excluding autos, retail stock levels are up for nine months in a row, with a big buildup in nondurable goods. Even with the upward revisions to year-end retail sales, the ratio of nonauto inventories to sales is at its highest level in the 19 years of record-keeping.

Until these excess goods are sold, retailers won't order many new products. That means factories will have little reason to gear up assembly lines—or hire new workers.

The new twist in the outlook is that the jump in interest rates hampers consumers' efforts to clean up their finances. That could hurt spending and keep retail inventories excessively high. The economy is in a catch-22: The bond market, which thinks a recovery is budding, may in fact be killing off the upturn at its roots.



ARE SHOPPERS BACK FOR GOOD?



THE WEEK AHEAD

FEDERAL BUDGET

Monday, Feb. 24, 2 p.m.

The federal government probably had a \$12 billion deficit in January, say economists surveyed by McGraw-Hill Inc.'s MMS International. The deficit would be a swing away from the \$1.7 billion surplus posted in January, 1991. Higher government outlays contributed to the deficit this January. The government is already \$83 billion in the red for the first quarter of fiscal 1992 and is expected to post a \$400 billion deficit for all of 1992.

CONSUMER CONFIDENCE

Tuesday, Feb. 25, 10 a.m.

The Conference Board's index of consumer confidence likely rose slightly in

February, to a reading of about 52, up from an extremely low 50.4 in January. That's suggested by the small rise in the index of consumer sentiment reported for early February by the University of Michigan. Still, both indexes continue to indicate that consumers are not upbeat about the economy.

DURABLE GOODS ORDERS

Wednesday, Feb. 26, 8:30 a.m.

MMS economists expect that new orders taken by durable-goods producers probably rose by just 0.5% in January. That would hardly reverse the 5.2% plunge that orders took in December. The small gain is suggested by the steep 1.3% drop in durable-goods output in January. The expected mild rebound in new demand

means that unfilled orders likely dropped in January, after falling 0.5% in December.

GROSS DOMESTIC PRODUCT (REVISED)

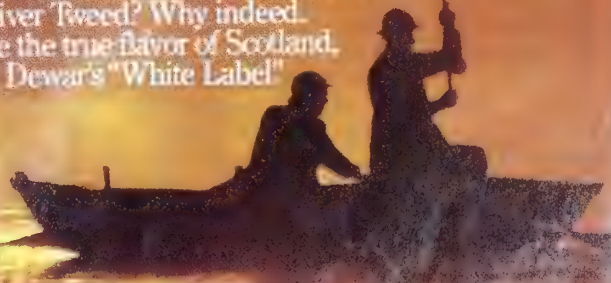
Friday, Feb. 28, 8:30 a.m.

The Commerce Dept.'s second look at the fourth-quarter gross domestic product will probably show that the economy grew at an annual rate of 0.5%, only a minor increase from the paltry 0.3% growth originally reported. An upward revision in consumer spending and inventory accumulation will slightly offset a deterioration in the foreign sector. The consensus also expects no change in gross domestic product price deflation, which shows that prices rose at an annual rate of 1.7% in the fourth quarter.

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River Tweed? Why indeed.
Taste the true flavor of Scotland.
Dewar's "White Label"





MARCH 2, 1992

RED ALERT AT THE WHITE HOUSE

'NO MORE KINDER, GENTLER STUFF. THIS IS A SERIOUS MATTER'

At first, he was dismissed as little more than a malcontent, a political "ankle-biter," in the withering view of White House toppers. But as conservative challenger Patrick J. Buchanan rolled up a surprising 37% of the Republican vote in the Feb. 18 New Hampshire primary, White House complacency gave way to shock. The morning after New Hampshire's angry verdict, a stunned President Bush nursed deep political wounds, contemplated the prospect of a long and divisive fight for the GOP nomination—and had to wonder how

much he had left behind in the Granite State.

Part of Bush—and it surely isn't his heart—remains back in New Hampshire, a trophy in Buchanan's inspired 10-week guerrilla campaign. By accusing the President of abandoning conservative principles, breaking his word on taxes, and spending more time worrying about Moscow than Main Street, Buchanan tapped into two powerful anti-Bush currents: discontent with the President's economic stewardship and rising resistance to the notion that politics is best left to profes-

sional politicians. "We have taken this measure of the political Establishment: a jubilant Buchanan declared. "The battle of New Hampshire is over. The battle for America begins." The challenge moves on to the next round of state contests, highlighted by primaries in Maryland and Georgia on Mar. 3, with the assurance of more money, more media time—and more respect from White House strategists.

Despite Bush's mugging in New Hampshire, financial markets shrugged off the President's political wounds. And Democrats weren't about to call in the interior decorators just yet for a make-



er of 1600 Pennsylvania Ave. For one
ng, Democrats have their own intra-
ty slugfest to endure (page 28), and
y are still dogged by the notion that
y lack a candidate of sufficient statu-
to capitalize on Bush's troubles. For
other, political pros and many of the
esident's business partisans believe he
ains the strength to win renomination
d mount a spirited general-election
mpaign—although the nominating

uggle will come at a
gh cost, widen the rift
etween GOP conserva-
es and moderates,
d make Bush more
lnerable in the fall.

MESSAGE. The pros
ve ample reason for
t counting Bush out.
rst, there's the frost-
e factor. New Hamp-
ire's reputation for
pporting political in-
rgents—voters there
re equally kind to a
emocrat-bashing Dem-
rat named Paul E.
ongas—makes the
ate's political culture
ique. Moreover, New
ampshire's cratered
onomy, one of the
rdest-hit in the na-
on, made Bush's eco-
mic mismanagement the prime issue,
ther than Buchanan's often incendiary
ews. As the campaign moves to other,
ss recession-blasted venues, the Presi-
ent figures to enjoy better luck rallying
epublicans. Indeed, 52% of Buchanan's
ew Hampshire supporters conceded
at they view their champion less as
residential material than as the means
send a wake-up message to George
ush.

The message, safe to say, arrived.
ew Hampshire was the first testing
round of a fledgling Bush campaign
organization still struggling to get
to fighting trim. And thus far,
ush's vaunted team has shown all
of the market-research acumen and
imble reflexes of Detroit's Big
three auto makers.

As a result, the President made
ome costly strategic blunders. His
our quickie visits into the state
ere hardly a match for Buchanan's
tensive stumping. Top Bush politi-
o Robert M. Teeter held off on
ough negative TV spots that could
ave damaged Buchanan, largely for
ear of widening the moderate-con-
ervative split in the general elec-
on. While Bush held his fire, "we
ad Buchanan kicking the hell out of

us for weeks," laments White House po-
litical director Ronald C. Kaufmann.

Bush's inept handling of his heavily
hyped State of the Union message hard-
ly helped his cause. The President un-
veiled his modest economic recovery
plan to widespread yawns in New Hamp-
shire, and comparisons of his domestic
vision with the bold leadership of the
Persian Gulf war sounded like a stretch
to most voters.

paign cash for his man. Indeed, Buchan-
an's ability to tap conservative mailing
lists has been impressive. Far from be-
ing outgunned in New Hampshire, he
poured \$2 million into the race and is
due soon for an infusion of \$1 million in
federal matching funds.

Over at Bush headquarters, a sobered
campaign crew has gone on red alert. In
the wake of the debacle, his political
team will close ranks and work much
harder to mobilize
grass-roots support for
Bush's imperiled candi-
dacy. In addition, the
President himself will
react by dropping the
studied ambivalence to-
ward his GOP rival. In
coming days, look for
Bush to paint Buchanan
as a dangerous fringe
candidate willing to lead
America back to a dark,
nativist past. "Get some
sleep, Pat," croons top
Bush aide Charles R.
Black, who honed his
own brand of political
pugilism with the likes
of Senator Jesse Helms
(R-N. C.). "You'll need it
now." Adds GOP activist
William J. Bennett: "No
more kinder, gentler



To make matters worse, Bush ap-
peared terminally indecisive by pulling
back from his own middle-class tax cut
on the eve of the vote. GOP conserva-
tives, furious over Bush's earlier retreat
from his no-tax pledge, strafed him with
new TV commercials that portrayed the
President as a drifting leader with no
political moorings.

Buchanan's surprising showing
"lances a boil that has been festering in
this party for four years," proclaims Bu-
chanan finance director L. Brent Bozell
III, who predicts a new surge of cam-

stuff. This is a serious matter."

Bush will come out fighting in Geor-
gia and elsewhere in Dixie. In 1988,
Bush's strongest political bastion was
the South, a region noted for its econom-
ic optimism and strong susceptibility to
patriotic appeals. This time around, the
President's men will seek to use Bush's
able direction of Operation Desert Storm
to drown out Buchanan's cries of "mod-
erate wimp."

More important, the Irish-Catholic Bu-
chanan's gut-punching style may not
translate well in the South. "The Presi-
dent is as strong in the South as he
is in any part of the country," says
Emory University political scientist
Merle Black. "But he must recon-
struct the coalition of conservatives
and swing voters that gave him victory
four years ago."

FIREBRAND. Even if Buchanan beats
expectations in Dixie and goes on to
do respectably well in some big
Northern primaries, Republican
nominating rules don't permit the
shenanigans that make Democratic
primaries such wonderful spectator
sports. As a result, Buchanan may
go on to score strong gains in the
popular vote, only to be denied the
delegates he would need to unseat

HOW NEW HAMPSHIRE VOTED

DEMOCRATS	
Candidate	Share of vote
TSONGAS	35%
CLINTON	26
KERREY	12
HARKIN	10
BROWN	9
CUOMO	3
REPUBLICANS	
BUSH	53%
BUCHANAN	37

Bush. That won't stop the conservative firebrand from being a force at the August GOP convention in Houston. But from the standpoint of delegates, Buchanan simply has little chance of matching Bush's support.

The President also has time on his side. Although it's scant comfort to Bush now, odds are strong that a gradually healing economy will lessen the sting of Buchanan's economic broadsides. Bush will also stage a diversion by stepping up partisan assaults on the Democratic Congress and returning to the highly charged social issues that can mobilize his conservative base.

Despite these advantages, though, George Bush's position bears eerie similarities to the one in which Gerald R. Ford found himself in 1976. Back then, a onetime conservative commentator named Ronald Reagan scared the wits out of the moderate GOP incumbent by nearly besting him in the New Hampshire primary. A Ford campaign guru named Bob Teeter serenely counseled his boss to stay on the high road and ignore Reagan's sterling sound bites.

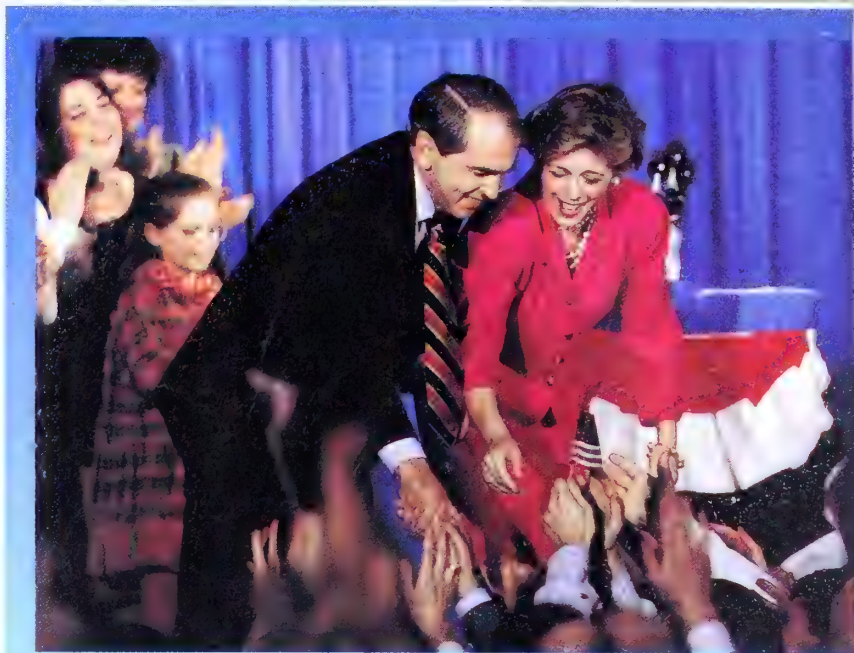
One of Ford's closest advisers was economist Alan Greenspan, then serving as head of the Council of Economic Advisers. Greenspan, who considered himself a master forecaster, told Ford not to worry when a year-old economic recovery seemed to hit the wall in mid-1976. Greenspan was on target economically—the "pause" ended in the fall, but the slowdown devastated Ford. The combination of economic distress and Reagan's relentless pounding softened up the hapless Ford for a November pratfall before a little-regarded Democrat, a southern governor named Jimmy Carter.

TIGHT SPOT. Few see George Bush meeting a similar fate—at least not after one primary setback. But at the very least, Bush will now have to step off his lofty pedestal and practice the old-fashioned retail politics—pork rinds, anyone?—that so unnerve him.

That leaves the President in a tight spot: Too many policy shifts to accommodate his restive right wing, and he looks like a vintage flip-flopper in the mold of Jimmy Carter, circa 1980. A too-rigid adherence to his discredited, above-the-fray campaign script, and he comes off like a latter-day Jerry Ford. About the best that Bush can do now, GOP veterans say, is keep his fingers crossed, pray for the long-delayed recovery Greenspan keeps talking about—and keep rooting for the Democrats to indulge in their traditional passion for self-immolation.

By Douglas Harbrecht in Nashua, N. H., and Lee Walczak in Washington, with Paula Dwyer in Manchester, N. H.

THE PRESIDENCY



★ BUSHES SMILE THE TRAIL—AND HOME FOR GLIMMER NEW HAMPSHIRE

'THIS WAS THE LEAST DESIRABLE OUTCOME FOR US'

The Democratic field remains a collection of suspect regional candidates

President Bush may have stubbed his toe on New Hampshire's rocky soil, but there is no joy in Demville. Far from celebrating Bush's misfortunes, Democrats who hoped to roll up their nominating process without the customary intraparty bloodshed are fretting that despite a compelling message of economic renewal, their Presidential field still consists of a few suspect regional candidates searching for broad national appeal.

Former Massachusetts Senator Paul E. Tsongas, whose "share the pain" sermons fit in with New Hampshire's glum mood this year, won the Democratic race with 35% of the vote. But the victory was diminished a bit by Tsongas' favorite-son status, and by his inability to finish off Bill Clinton. "This was the least desirable outcome for us," laments a top Democratic operative. The Arkansas governor, who garnered 26%, recovered from a political swoon triggered by allegations of marital infidelity and draft-dodging, setting up a showdown with Tsongas in the South. The first real test comes on Mar. 3, with the primaries in Georgia and Maryland (table).



There's growing worry among Democrats that both Tsongas and Clinton are flawed candidates. As the Grinch who stole New Hampshire, the dour Tsongas will have a tough time appealing to Independent Democrats. "He has the message

of an investment banker and the bedside manner of a proctologist," says Democratic strategist Terry Michael. Another Democratic pollster, Charles Darden, says Tsongas is a "safe harbor for Southern Democrats because of his

economic message. But first he has to come down here. Nobody knows anything about him."

'HE'S A FLUKE.' Tsongas will also need a gusher of campaign donations to buy TV and radio ads and organize for the grueling marathon ahead. And unfortunately for his cash-starved campaign, it may take a win in a state outside of New England before wary donors are convinced Tsongas is something other than a regional attraction.

To be sure, Tsongas' attacks on the Democratic Establishment played well in New Hampshire. But for now, his appeal is concentrated with more independent-minded suburbanites than with such

onal Democratic constituencies as la-
 "I truly believe he's a fluke," says
 etta Bowen, political director of the
 munications Workers of America.
 While Democratic bigwigs fret that
 ngas isn't charismatic enough, they
 re the opposite worry about Clinton,
 accident-prone candidate whose very
 itical polish is working against him in
 year of the outsider. Perhaps more
 n the furor over Gennifer Flowers,
 nton has been hurt by release
 a 1969 letter that indicated that,
 n as a college student, he was
 gling to maintain his "political
 bility" while avoiding the Viet-
 n draft.

Clinton hopes for resuscitation
 ith of the Mason-Dixon line, espe-
 cially in the Georgia primary. In
 yland, though, he's no longer
 ead-pipe cinch, despite a wave
 early endorsements by state
 cted officials. "There's a big op-
 rtunity there for Paul," says
 yland Democratic Chairman
 than Landow.

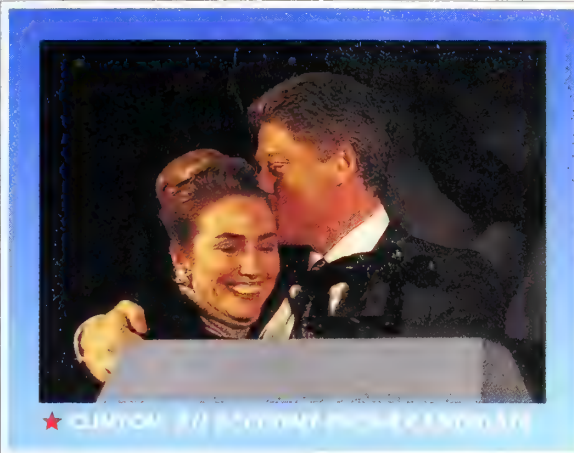
Prospects should be better for
 nton a week later in the Mar. 10
 and of contests in the Deep South. But
 en on home turf, he's still seen as
 maged goods. No one knows whether
 e draft-dodging issue could erode his
 pport with conservative Southerners,
 whether charges of new indiscretions
 ll surface. Concludes pollster Alan Se-
 : "Clinton is on the political equiva-
 nt of a Bataan Death March. He may
 ke the South, but he's fighting a war
 attrition."

As if the prospect of Tsongas as a
 orthern favorite and
 nton as a purely
 uthern force isn't un-
 tling enough, Demo-
 atic power brokers
 en't thrilled by New
 mpshire's failure to
 amatically winnow
 e field. Political histo-
 would argue that
 wa Senator Tom Har-
 n should cash in his
 ips after his dismal
 % showing. But Har-
 's labor supporters
 e determined to keep
 s candidacy alive un-
 the first of the big
 st Belt primaries on
 ar. 17.

ET BLANKET. Labor
 asted no time giving
 arkin a shot in the
 m. After the AFL-CIO
 ecutive Council voted
 Feb. 19 to permit in-
 ividual unions to en-
 se candidates, nine
 ajor industrial unions

banded together to breathe new life into
 their champion's flagging campaign. Al-
 though they've already given Harkin the
 maximum cash contributions, the unions
 will rush manpower and organizational
 support to his aid.

Nor is Senator Bob Kerrey going
 gently into that good night. While the
 Nebraskan boasts of winning a "bronze"
 medal in New Hampshire, his cam-
 paign's chances for a revival in the niche



states of Colorado and South Dakota
 aren't likely to impress party fund-
 raisers. That means Kerrey could soon
 find himself out of both charisma and
 cash.

On the latter score at least, Clinton
 appears to have no problems. As soon as
 the votes were tallied in New Hamp-
 shire, the Arkansan flew to Florida,
 where he expects to rake in \$1 million in
 a series of five fund-raisers. At the mo-
 ment, Tsongas can only dream of such

big financial scores. "The CEO of Macy's
 wrote an op-ed piece recently praising
 Tsongas' economic policies," Tsongas
 told BUSINESS WEEK. "All I could think
 of was, 'Why won't he just send me a
 check?'"

REALITY CHECK. Unhappy as many Demo-
 crats are with their choices, the New
 Hampshire outcome has thrown a wet
 blanket over the idea of a late entry into
 the race. A week ago, it appeared likely
 that either House Majority Leader
 Richard A. Gephardt (D-Mo.) or
 Senator Lloyd Bentsen (D-Tex.)
 would jump in. That speculation
 was based on the assumption that
 Clinton would continue his nose-
 dive and that Tsongas couldn't fill
 the void. But the pair's close one-
 two finish and a fizzled write-in
 effort on behalf of New York Gov-
 ernor Mario M. Cuomo injected a
 new dose of reality into the back-
 room machinations. "It is legally
 and procedurally possible" for a
 late-starting heavyweight to win
 the nomination, says liberal activ-
 ist Ann F. Lewis. "But it's politi-
 cally less likely now."

Overwhelmingly Republican business
 interests, who can't be happy about
 George Bush's political weakness, can
 take heart from one important feature
 of the early rounds of the Democratic
 Presidential competition: Both Tsongas
 and Clinton come from the moderate-to-
 conservative side of the Democratic
 spectrum, and neither one chokes when
 uttering such business-friendly phrases
 as "investment incentives" or "the mag-
 ic of the marketplace." Says Democratic
 analyst William Gal-
 ston: "Both men are
 talking about growth-
 and investment-oriented
 policies."

Now, if either Tson-
 gas or Clinton could
 just convince uncertain
 Democratic regulars
 that they've got the
 right stuff to take on
 Bush. "I feel like I'm on
 one side of a river, and
 I can see a beautiful
 garden on the other
 side," says a wistful
 Richard L. Trumka,
 president of the United
 Mine Workers. "But all
 I have is a leaky rubber
 raft to get me across.
 It's frustrating." And
 it's Democratic politics,
 '92 style.

*By Paula Dwyer and
 Douglas Harbrecht in
 Nashua, N.H., with
 Susan B. Garland in Bal-
 Harbour, Fla.*

WHAT'S AHEAD FOR THE DEMOCRATS



GEORGIA A key test of strength in the South, where blacks
 dominate Democratic primary voting in many states. Clinton
 gains an early chance to bounce back. The economy and
 defense cuts are the big issues



MARYLAND The huge vote in the Washington and
 Baltimore suburbs makes Maryland a key urban test
 for Democrats, especially Clinton and Tsongas. Most
 voters are undecided



COLORADO Energy and the environment are the central
 issues in the first Western state to vote. Kerrey, who has
 adopted much of former Colorado Senator Gary Hart's
 platform, has poured big bucks into the state



MINNESOTA The state, with its liberal-populist tradition,
 is a natural for Harkin. But even if he wins, the same old
 question will continue to dog his campaign: Can he win in
 a state that doesn't border Iowa?

ALL EYES ON TSONGANOMICS

The probusiness front-runner faces harder questions now

Call him the un-Democrat, the man who would turn FDR's portrait to the wall and invite crowds of small-business owners into the White House. And forget the jokes about "another Greek from Massachusetts." Paul E. Tsongas is no Michael Dukakis. With his probusiness platform and his disdain for the "Santa Claus giveaway" campaign promises of his Democratic opponents, Tsongas often sounds more like a moderate Republican than a Democratic standard-bearer.

That may be the secret of his early success. Ask William Hoffman of Hollis, N. H., a self-proclaimed Reagan Republican who voted for the former Massachusetts senator. "Tsongas really recognizes reality—he's an Eisenhower Republican. That's why I like him," exclaims Hoffman, owner of Concrete Cutting Corp., a small construction business. Or ask Christopher Weber, a California business consultant who found himself pulled into a crowded motel ballroom in Concord, N. H., with hundreds of other Tsongas supporters, their noses buried in the candidate's 86-page *A Call to Economic Arms*—all waiting for the candidate to arrive. "I never voted for a Democrat before, but I'll vote for Paul Tsongas," says Weber.

Many mainstream Democrats are watching Tsongas' progress with exasperation, if not hostility. Grouses Will Marshall, president of the centrist Progressive Policy Institute and a supporter of Arkansas Governor Bill Clinton: "There is very little in [Tsongas'] program about the underclass. He doesn't talk about family breakdowns, pregnancy, high crime, unemployment. It lacks compassion. It's too technocratic."

DEATH TRAP. Meanwhile, Tsongas revels in criticism from the party Establishment. "Democrats have always been antibusiness, class-warfarish, and protectionist. That's an economic death trap," he says. The Tsongas solution: tax cuts and investment incentives for business. But the middle class would get a jolt: higher gasoline taxes, no cut in income taxes, and no special breaks targeted to kids. And he would promote



energy independence by encouraging the development of nuclear power, an idea that outrages many environmentalists.

Tsongas also gives organized labor fits. His educational program—merit pay for teachers, school vouchers, national standards for testing and curriculums—is about as welcome at the American Federation of Teachers as fingernails dragged across a blackboard. And he's no hero to the AFL-CIO. "He has no support, none whatsoever," says Jack Sheinkman, president of the Amalgamated Clothing & Textile Workers Union. "He doesn't represent the viewpoint of most Americans."

That's not all that irks unionists. Tsongas' growth of sectors such as high-tech electronics. "There will continue to be industrial obituaries," he told BUSINESS WEEK. "The problem is, we aren't focused on industrial birth notices. We must get away from a sunset mentality, a mentality in which you think you are in decline, you see what's left, and try to save it."

FAST ENOUGH? For all of his attention to the needs of business, Tsongas admits that before Tuesday's eight-point victory over Arkansas Governor Bill Clinton, he wasn't exactly being flooded with business support. But he's hopeful. "Once they begin to say, 'Gee, this guy has a chance,' the chemistry changes. The question is, does it change fast enough to keep us alive?"

Tsongas' tenuous front-runner status and iconoclastic behavior may not suit the Democrats too well, especially in the South and Midwest. Once Tsongas is placed under the real-life microscope, his appeal may wear pretty quickly, warns Republican strategist Kevin Phillips. The front-runner's service to corporate boards should suffice to explain his probusiness slant, says Phillips.



YOU SURE HE'S A DEMOCRAT?

TSONGAS POLICIES THAT MAKE THE OLD GUARD SEE RED

- ▶ **MIDDLE-CLASS TAX CUT** Opposes it, calling it a "Santa Claus" giveaway to parents, to be paid for by their children
- ▶ **CAPITAL-GAINS TAX CUT** Favors a cut in taxes on stock sales. The longer the holding period, the smaller the tax rate. (Lower rates up to investment in smaller outfits)
- ▶ **EDUCATION** Favors merit pay for teachers, longer school years, and national standards for curriculum
- ▶ **ENERGY** Favors nuclear power, encourages energy conservation

n New Hampshire, the seeming novelty of his economic program took Tsongas a long way. In the weeks to come, however, he is sure to be hit with harder questions about his service as a lobbyist for Drexel Burnham Lambert and other corporate interests. In other words, Tsongas will undergo the same sort of trial-by-media that singed Clinton.

Tsongas' preaching against the economics of instant gratification—while promising a better future—appealed in New Hampshire, where recession-weary voters distrust easy solutions. It may be a much tougher sell in the delegate-rich primaries that lie ahead.

By Paul Magnusson in Washington and Douglas Harbrecht in Nashua, N. H., with Paula Dwyer in Concord, N. H.

KEY & BANKING

BREAK FOR BANKS THAT WON'T HELP CONSUMERS ONE BIT

Lower Federal Reserve requirements will boost profits, not lending

For Representative John W. Cox Jr., a first-term Democrat from Galena, Ill., it was a chance to take Economics 101 with Professor Greenspan. When banks lend more, that increases the money supply, and that boosts the economy?" Cox asked the Federal Reserve chairman at a Feb. 19 hearing. Alan Greenspan gently corrected him: "It isn't the money supply that stimulates the economy—it's the lending." Cox: "And you're trying to encourage more lending?" Greenspan replied: "That's it exactly," Greenspan replied.

The performance earned the congressman an A as he struggled to figure out what's behind the Fed's latest change in monetary policy. On Feb. 18, the Fed cut reserve requirements—the amount of money banks must keep on deposit with the Fed—for the second time in 14 months. When the reduction takes effect in April, it will free nearly \$9 billion that banks can use to buy securities or make loans.

ON OF MONEY. Bankers cheered the change—but they're not talking about a quick boost in lending. "We've got a ton of money to lend," says a spokesman at Banc One Corp. of Columbus, Ohio. "It's finding creditworthy customers to lend to that's the problem."

Other bankers agreed. And that means the initial consequence of the Fed's move will be a boost in bank profits by about 2.5%, as they trade freed-up cash for securities, but no real letup in the credit crunch. Fed officials argue that the change is designed more to modernize the banking system

than to stimulate the economy, anyway.

Central banks consider required reserves a necessary evil: The reserves control commercial banks' ability to create money. Today's 12% reserve requirement lets banks lend roughly \$8 for every \$1 of reserves. The new 10% rule will boost that leverage to 10-to-1. The change won't affect banks' loan-loss re-

Fed \$1 billion a year, increasing the federal deficit. So while banks find innovative ways to create new accounts that aren't subject to reserve requirements, the Fed is acting on its own to lighten their burden.

SAFEST MOVE. The Fed has been considering the move since it made the last reserve cut—in late 1990. This one was timed to coincide with February's seasonal low in banks' reserve accounts. "This is not a short-term policy move" to boost the economy, insists a top official. But Wall Street wasn't buying: Short-term interest rates fell in anticipation of banks' using their extra cash to buy Treasury securities, while rates on the Treasury's 30-year bond shot up to a three-month high near 8%. The rise in long rates is worrisome: Bearish bond traders could pull mortgage rates back above 9% and stifle the housing rise (page 23).

The change in reserve requirements was probably the safest policy move the Fed could make in the face of a confusing economic outlook. Greenspan describes himself as "somewhat more confident than I have been recently" of a second-quarter upswing in economic activity, led by homebuilding, retail sales, and a bounce-back from January's sharp drop in factory production. Economic optimists argue that long-term rates are rising on fears that the Fed will ease too much just as the recovery picks up, stimulating inflation.

But other Fed officials wonder whether the spring upturn will take hold this time—or vanish as it did last year. With commercial construction and state and local spending "sitting out the recovery," one policymaker argues that the economy "only has two engines, housing and exports. Rising long rates shoots down one, and the stronger dollar shoots down the other." If those trends worsen, pessimists argue, the Fed will have to ease short-term interest rates again, to offset rising market rates.

If another cut is needed, Fed officials know it will have to be sizable. After the Fed's big move in December, nobody will be impressed by a return to what some insiders call "the quarter-point treadmill" of small steps through 1990 and 1991. Those expectations only raise the ante in what was already a high-stakes game.

By Mike McNamee in Washington, with Zachary Schiller in Cleveland



serves, the funds set aside on an institution's balance sheet to cover expected losses on bad loans.

For decades, the Fed has been trying to win the right from Congress to pay interest on banks' reserve accounts. "Reserves are a deadweight loss and a drag on banks' ability to compete" with other lenders, says a top Fed official. But paying such interest would cost the

JAPAN'S SHARP TURN

With nowhere to grow, producers try to squeeze out more profit

Japan's corporate giants traditionally have relied on one tried-and-true mantra for keeping profits strong: Grow, grow, grow. Fierce competition in many of their markets meant razor-thin margins, so these powerhouses knew that to survive, they had to innovate, automate, and crank out products. The result? Sales ballooned, while profits generally headed upward.

Suddenly, there's no place to grow. The U.S., European, and Japanese economies are in the dumps, and Japan's \$78 billion trade surplus makes carving out fresh market share abroad politically unacceptable. As a result, profits are slumping even for Japan's red-hot companies, including Matsushita, Nissan, and Honda. Even Sony Corp. expects to announce its first domestic operating loss in 34 years. Growth in volume no longer guarantees profits.

What to do about the problem has set Japan's corporate boardrooms abuzz. A few companies, led by the big carmakers, are already taking action. Most notably, Toyota Motor Corp. announced on Feb. 14 that, as of Mar. 13, it would hike prices 3.2% on U.S. models and 5% on the luxury Lexus line. Honda and Nissan Motor Co. say they may follow suit. **'CARTEL'** Chip and computer giants, consumer-electronics companies, and machine-tool makers can't do the same. "If Toyota raises prices, it's called leveling the playing field with Detroit," says an executive at one Japanese manufacturer. But "if Sony or Matsushita tried it, everyone would be screaming 'cartel.'" So they are developing less obvious strategies for avoiding red ink during a global recession. Their techniques: reducing development costs, migrating away from commodity goods, and milking hit products for as long as possible.

For beleaguered U.S. and European auto rivals, Japan's antirecession measures, including price increases from Toyota and others, could open big opportunities. "The worst of the Japanese onslaught is over," says Stephen Marvin, an auto analyst at Jardine Fleming Securities Ltd. in Tokyo. Indeed, Detroit's Big Three are already testing how best

to take advantage of Toyota's move (page 35).

In other industries, Japan's solution to profit problems may just be to make the competition fiercer. For instance, such big chipmakers as NEC, Fujitsu, Toshiba, and Hitachi are spending heavily to reduce their dependence on commodity memory chips. They want to realign their product offerings on more custom chips and microprocessors—the stronghold of such U.S. industrial leaders as Intel Corp.

Still, the pressure on Japanese companies to ease off competitively, even temporarily, is immense—and growing. Much of it is plainly political. Nissan Executive Vice-President Yoshikazu Hanawa worries that if Japan's share of the U.S. car market rises much above its current 30%, "bashing will increase, and America will stop free trade." Similar concerns have led Toyota to drop its "Global 10" promotional campaign among dealers. The goal: to grab 10% of the world car market. "We have to be a little bit careful not to be interpreted as a sort of steamroller," says director Mototsuke Tominaga.

But the more compelling pressure is financial. "Our key challenge is how to achieve solid profitability in this new environment of slower growth," says Honda Motor Co. President Nobuhiko Kawamoto. That won't be easy, given Japan's debt hangover from the torrid expansion of the late 1980s.

In those days, when the Nikkei seemed buoyed by helium, companies issued huge amounts of convertible bonds at rates as low as 1% or 2%. Now, the market is stuck in its most serious slump since 1965 (page 34), and some \$80 billion worth of those bonds must be redeemed over the next two years—\$6 billion in just the auto industry. To redeem them, most bond issuers will have to borrow at current interest rates of 6% to 7%. Nissan alone has a \$1.5 billion convertible bond due in 1993, issued when the company's share price was at \$13. The stock now trades around \$5.

There's also social pressure on Japanese companies to change the way they

HOW JAPAN'S CORPORATE GIANTS PLAN TO REBUILD PROFITS



Raising prices Higher prices can mean higher profits. Toyota plans to hike prices on 1992 models by 3.2%

do business. Opinion leaders such as Shiro Hiraoka, chairman of the Keidanren, Japan's powerful federation of economic organizations, are calling for improving Japan's quality of life by cutting the workday. In Japan, the movement is called *jitan*, and it's the battle cry of this year's spring wage negotiation. The average Japanese still clocks 2,100 work hours per year, some 200 more than Americans and 500 more than Germans. Japan's Labor Ministry is pushing companies to slash that to 1,800 by 1993. Toyota, for one, figures this cut will be equal to reducing its annual production by 500,000 cars. Nissan is worried, too. "We're going to lose some of our competitiveness," says Hanawa.

SLIMMER LINE. To deal with all the pressures on their profit margins, Japanese manufacturers are considering such moves as keeping products on the market for longer periods. The Ministry



Lengthening product lines Long product lines lead to high overhead. That's

why Matsushita will streamline its 50,000-product line by up to 30%



Lengthening product cycles By keeping products on the market longer, Japanese companies have time to maximize returns. Many Japanese television makers are considering this option

Concentrating on super-sophisticated products To build sales in competitive industries, Japanese manufacturers are trying to produce state-of-the-art products, which yield high margins. That's Toshiba's strategy in laptops

Moving offshore Offshore manufacturing cuts overhead. That's why Hitachi plans to transfer all TV production to Mexico



Giving up Some Japanese companies are simply giving up on unprofitable markets. That's why auto maker Daihatsu is pulling out of the U.S.

DATA BW

International Trade & Industry is currently discussing a push to lengthen product life cycles for autos and electronics with the Labor Ministry and Fair Trade Commission. Nissan is already testing this strategy: Hanawa says new versions of Nissan's Bluebird, called the Monza in the U.S., and its British-built camera, likely won't be revamped for five or six years, vs. four now.

Matsushita Electric Industrial Co. has another strategy for dealing with the downturn. Starting in April, it will begin streamlining its 50,000-odd consumer-product offerings by as much as 30%, dropping low-end audio goods and adding sophisticated new stereo systems that buyers can program to individual taste. Of the company's current 40-model TV lineup, for instance, only large-screen sets and models with advanced features, such as built-in VCRs, are sure to make the cut. "We want to see a

smaller number of products selling for a longer period of time," says Matsushita Managing Director Keiichi Takahata. "If we market a product properly, we can make it a hit."

SACRED R&D. Companies are getting stingy in a lot of other ways, too. To offset soaring product-development costs for up-market electronics goods, Hitachi Ltd. is teaming up with Minolta Camera Co. to design high-resolution 8mm camcorders. Most companies are also slashing capital expenditures. Fujitsu Ltd.'s planned \$1.76 billion budget for the fiscal year ending March, 1992, was cut 9%. And as inventories balloon, companies are paring back production. Honda pared 55,000 cars in February and March, and Mazda cut 30,000. Toshiba's total PC output this year will be 20% less than originally slated.

Despite profit worries, most Japanese companies continue to invest in the fu-

ture. Many, for instance, are increasing spending on production automation to help offset the nation's acute labor shortage. And research budgets remain sacred. Honda, for example, is cutting domestic capital spending this year by 11%, to \$640 million, while beefing up research to more than \$1.5 billion.

That level of investment means Japan is likely to roar out of this slump the way it emerged from the 1970s oil crisis and the mid-1980s yen runup. "It's not likely we'll be able to raise market share in the short term," says Toyota's Tominaga. "But that doesn't mean we won't grow again." Translation: Japanese companies are moderating for now. But when the recession lifts, Tokyo's financial markets stabilize, and political pressures ease, they'll probably be back to the old grow, grow, grow.

By Karen Lowrey Miller and Neil Gross in Tokyo

CAN TOKYO KEEP THE NIKKEI FROM GOING THROUGH THE FLOOR?

So far, plans to avoid a panic sell-off are pretty nebulous

Japan's financial barons are in a blue funk. Tight money is making the once-vibrant Tokyo stock market seem like a graveyard. Making matters worse, the Japanese economy is slowing to a crawl.

Sounds like Tokyo today, right? Guess again. That was Japan, circa 1965, during the country's last big stock market crisis, when the Tokyo market plunged 39% before bottoming out. This time around, the Nikkei Stock Average is down 47% from its peak of 38,915.87 at the end of 1989. So, worried that banks, real estate values, and the rest of the economy will take a pounding if the market drops much below the psychological threshold of 20,000, politicians and regulators are mulling over a variety of measures to keep stocks afloat. "When

you get under 20,000, there's no support left," frets one Tokyo fund manager. "People could start panic-selling because they think there's no bottom."

LITTLE AVAL. To avoid such a panic, the ruling Liberal Democratic Party (LDP) and the four major stockbrokers are urging big changes in Tokyo's securities rules. They want companies to pay higher corporate dividends and are considering allowing stock buybacks and cutting the capital-gains tax (table). Yet bureaucrats and financiers fear that this rescue package may have as little impact as one they tried 27 years ago.

Back then, even brokers' massive purchases of shares couldn't stop the Nikkei's fall. It took sharply lower interest rates, together with the prospect of real economic recovery, to bring the bloodletting

to an end. Japan's financial community is convinced similar action is needed today. Nothing short of a dramatic cut in the Bank of Japan's 4.5% discount rate is likely to lure significant sums back into the market, traders say. With falling stock prices putting pressure on banks and real estate, "what this market is



waiting for is the Bank of Japan saying this economy needs help," says Robert Zielinski, an analyst at Jardine Fleming Securities Ltd.

Trouble is, forceful help probably isn't yet in sight. In fact, Bank of Japan Governor Yasushi Mieno, wary of inflation, is moving with caution. Even though Merrill Lynch & Co. estimates that the

Japanese economy will expand just this year, Mieno insists growth will be 3.5%. That means he's unlikely to cut the discount rate more than a modest half percentage point in March.

With Mieno refusing to ease money, the LDP is focusing on micromeasures to lessen Japan's financial stress. But even these proposals fall short of what's needed. Take the party's plan to cut dividends. It suggests that companies raise their payout to 50% of profits from the current 33%.

TIMID STEPS. Still, this won't provide much more than a psychological boost. Zielinski notes such an increase would raise average yields from 0.7% to 1%, hardly enough to win back wary investors. Financial markets are as cool to a similar plan by the Tokyo Stock Exchange and the Japan Securities Dealers Assn. to increase the payout modestly on shares issued after April. "This alone will not be enough to revive the market," concedes Tohru Akatsu, the exchange's research planning chief.

LDP proposals to lower levies on capital gains, meanwhile, are getting a chilly reception where it matters most: at the Finance Ministry. Even though individuals pay only 20% on capital gains, the cash-strapped ministry is loath to forgo any revenue—as tax collections slow along with the Japanese economy.

With money still tight, the ministry is equally reluctant to prod investment trusts, the local equivalent of mutual funds, to put more money into stocks. "It would be ridiculous for the ministry to encourage institutions to buy more shares. They aren't a safe investment," says Akio Mikuni, owner of Tokyo credit-rating agency.

Even if these remedies work, most would require approval by Japan's Diet. But a series of scandals enveloping the LDP has brought the legislature close to gridlock. As a result, lawmakers are way behind schedule considering the budget for the next fiscal year.

TRYING TO PROP UP THE NIKKEI

Here are some steps that Japan's financial regulators are considering to halt the Nikkei Stock Average's long slide:

- ▶ **Cut interest rates** The Bank of Japan is expected soon to slash its discount rate by a half percentage point, to 4%
- ▶ **Reduce taxes on stock transactions** The move could boost trading volume, but a 1990 capital-gains tax cut had little effect
- ▶ **Permit companies to buy their own shares** Could prop up stock prices, but many companies don't have the cash to take advantage of this change
- ▶ **Urge higher dividends** Could attract new investors, but payouts would remain modest
- ▶ **Pressure banks to limit lending** Will ease pressure on banks to sell off assets, but will slow the economy

DATA: BW

ch begins on Apr. 1. There isn't likely to be any time left to take up market-support legislation.

That could be unwelcome news for Wall Street, which saw Japanese investors pull \$2.9 billion out of U.S. stocks as the Nikkei began its long slide. And Japanese banks, which are allowed by regulators to consider unrealized profits in their vast stock portfolios as capital, would greet a plummeting Nikkei with no greater dismay.

EROSION. Most of the gains that helped keep the banks' capital up to internationally agreed-upon standards will be melting away once the average price falls to around 18,000. With the banking industry already facing an estimated \$80 billion in bad loans at home and abroad, lenders fear such erosion could leave some institutions short on capital when new international banking-capital adequacy standards take effect in 1993. The deterioration of the financial system, says Moody's Investors Service analyst Masaru Kakutani, "is becoming a critical issue."

Some worry that any capital shortfall could force banks to dump equities to raise cash, putting even more pressure on the market. But most banks may have already insulated themselves from the worst Nikkei shocks.

For example, Japanese lenders have withdrawn some \$34 billion from U.S. banks since the Tokyo market peaked. They have also sold billions of dollars worth of other assets and issued subordinated debt. Some are likely to start selling high-yielding preferred shares to Japanese insurers. "The relationship of the stock market to the [capital] standards isn't nearly as serious as many people think," says David Atkinson of Jomom Brothers Asia Ltd.

Maybe not. But most traders believe that even inflation hawk Mieno won't want to test that proposition for too long if the Nikkei drops very far below 20,000. "We would get an interest-rate cut pretty quickly," says Stephen B. Condon, managing director of Warburg Investment Trust Management Co. Indeed, some foreign investors, betting rate reductions are inevitable, are already buying into Tokyo whenever the Nikkei rises. "Every time they put stocks on sale," says Elizabeth J. Allan, portfolio manager for Japan Fund Inc., "we'll buy a few."

Despite all the gloom and doom enveloping the Tokyo market, "we haven't reached the panic stage yet," Allan maintains. Just like the traders of 1965, and a lot of other market players are counting on a quick shot of cheaper money to give Japanese stocks the boost they desperately need.

By Robert Neff, with Ted Holden, in Tokyo and William Glasgall in New York

Commentary/by James B. Treece

PRICE HIKE: MOTOWN MAY BE SHOOTING ITSELF IN THE TIRE AGAIN

The reaction hit even before the action. Hours ahead of Toyota Motor Sales USA Inc.'s announcement on Feb. 14 that it would raise sticker prices on Toyota cars and trucks an average 3.2%, General Motors' Saturn Corp. unit said its own base price would jump between 0.8% and 2.4%, and more for certain popular options. Saturn's increases will kick in on Mar. 1, Toyota's on Mar. 13.

The move by Saturn was all too predictable. With other Japanese carmakers exploring price increases, each U.S. auto maker is likely to follow suit. But an across-the-board increase in new-car stickers would be the wrong response. This is Detroit's chance to win back young buyers.

We've seen this show before. In the early 1980s, when "voluntary" export quotas pushed prices of Japanese cars higher, Detroit's carmakers raised prices, too. When a rising yen forced the Japanese to push up prices rapidly in the late 1980s, GM, Ford, and Chrysler again raised their prices, rather than snatch market share from Toyota, Nissan, and Honda.

This time around, says David N. McCammon, Ford Motor Co.'s vice-president for finance, Ford has no current plans to raise its base prices. But Ford and GM have been testing the waters by trimming rebates and other incentives on select 1992 models. On Feb. 5, Ford cut its rebates on the Mustang and the Mercury Grand Marquis. GM dropped its \$500 rebate on the Chevy Beretta. Only Chrysler Corp. has held rebates about the same.

SCARCE PROFITS. Initially, Saturn attributed its increase to higher costs. Baloney. The January producer price index for finished goods, excluding volatile food and energy, was up 2.5% over the past year. But the price of materials and components for manufacturing actually fell, by 2.3%.

When pressed, Saturn execs admit that the hikes aren't all that related to raw costs. Says Donald W. Hudler,

vice-president for Saturn's sales, service, and marketing: "As good as we are, we don't need a \$1,500 to \$1,800 price edge on the Japanese, which is where we would be" without the hike.

Maybe not. Then again, the differential wasn't quite that large. A Saturn SL1 compact with automatic and air conditioning now is priced \$1,270 below a comparable Honda Civic DX. But throw in the Civic's standard driver-side airbag, which Saturn offers as a

\$625 option, plus hidden dealer incentives that a determined haggler may be able to convince a Honda dealer to kick in, and Saturn's edge narrows to under \$150.

There's nothing wrong with taking advantage of a rival's higher prices, of course. After all, profits have been as scarce in Detroit recently as running boards on Corvettes. Last year, the Big Three lost some \$8

billion. With car sales at last showing signs of rebounding, it's natural for the companies to trim incentives and even raise prices a bit.

'TRY AMERICAN.' However, hiking prices on entry-level cars, such as Saturn's SL1, is the wrong way to go. Detroit lost a generation of first-time car buyers in the 1970s when shoppers who chose Japanese cars got nifty, fuel-efficient models—and those who chose Detroit wheels too often got lemons. Now, in such models as the SL1 and Ford's Escort, Detroit finally has entry-level cars with quality and features comparable to Japan's. Yet, the Big Three's market share in this segment remains quite low (chart).

In coming weeks, Detroit should selectively raise prices, as the market allows, on bigger cars and trucks but not on entry-level models. Such a strategy would piggyback smartly with the nation's new "Buy American" mood. Says Ford's McCammon: "We would favor 'Try American.' We would like potential buyers to try ours, try theirs, and compare." Holding the line on small-car prices would make that comparison even more compelling.



DEBACLE AT DOW CORNING: HOW BAD WILL IT GET?

Lawsuits by implant recipients and shareholders could cost it a fortune

The comparisons are already in the air. A. H. Robins and the Dalkon Shield contraceptive. Manville Corp. and asbestos.

Dow Corning Corp. is quickly becoming the latest casualty of mounting liability woes. Hundreds of women are expected to file suit alleging that the Midland (Mich.) manufacturer hid the health risks of its silicone gel breast implants. It also faces a barrage of shareholder class actions and possible government probes. The damage suits alone could cost the company hundreds of millions of dollars—against a business that contributed less than 1% of Dow Corning's \$1.84 billion in 1991 revenues and has been unprofitable since 1986. And because many believe Dow Corning responded slowly to safety concerns, the ultimate tab "will be much higher than if they faced this thing determinedly at the outset," says Harvey L. Pitt, a partner in the law firm of Fried, Frank, Harris, Shriver & Jacobson.

OVERSEAS CALLS. The big question is whether the volume of suits will drive Dow Corning into filing for Chapter 11 bankruptcy protection. Just in case, lawyers are researching the potential liability of Dow Corning's 50-50 owners, Dow Chemical and Corning. Corning says it's not responsible for the joint venture's liabilities, while Dow Chemical asserts that as a shareholder in Dow Corning, it's not liable for the actions of that company. Dow Corning counters liability worries by insisting that the implants are safe. "The costs of defending ourselves are going to be significant," adds J. Kermit Campbell, group vice-president for U.S. operations, but "it's not something we can't handle on a short-term basis."

That may be so, but Dow Corning is still at great financial risk, especially from suits by implant recipients (table). Dan Bolton, a San Fran-

cisco attorney who last December won a judgment against Dow Corning, says there are close to 1,000 such cases against implant makers, including Dow Corning. More are on the way. Connecticut attorney Karen E. Koskoff, who co-chairs a trial lawyers' breast-implant litigation group, reports receiving calls from lawyers around the world seeking advice on filing suit. Dow Corning's national breast-implant counsel, Frank C. Woodside III, says the company has been served with about 200 suits, but "we don't have all of them." He also says "there's going to be more suits, no question about it," referring to the Food & Drug Administration's recent hearings on whether to ban the devices.

Plaintiffs got their biggest boost in December, when a San Francisco jury agreed with Mariann Hopkins that Dow Corning knowingly sold her a defective implant and awarded her \$7.3 million. The only other verdict against Dow Cor-

ning was for \$1.7 million in 1984, but the company is quietly settling cases. And it took a \$25 million fourth-quarter charge to pay for shutting down the plant business. The charge included legal fees.

Shareholders of Corning, which gets 25% of its profits from the joint venture, are also running to court. Large awards to implant recipients will, of course, damage their interests. They already took a bruising on Jan. 13, when Corning stock fell 13% following reports of internal Dow Corning documents questioning the implants' safety. Joseph Reiss, a Corning shareholder from New York, recently filed a suit seeking class action status accusing Corning, Dow Chemical and Dow Corning of violating securities laws by failing to disclose the implant risks. Corning believes the case is without merit. Dow Chemical claims that it is shielded from liability.

FELONY CHARGE? By seeking Chapter 11 protection, Dow Corning could put a temporary halt to the private litigation and resolve all the claims simultaneously. A. H. Robins, for example, sought bankruptcy protection to avoid the risk of multiple punitive-damage awards over its Dalkon Shield contraceptive. Dow Corning says it isn't considering bankruptcy. But the company may have little choice if suits continue to flood in from the 600,000 women with its implants.

Even if the company did seek bankruptcy protection, it would still risk government civil and criminal probes. On Feb. 14, Representative Ted Weiss (D-N.Y.), chairman of a subcommittee overseeing FDA activities, sent the Justice Dept. a letter requesting an investigation. Weiss says documents his staff reviewed may show that the company misrepresented its safety data on implants for more than 15 years. If that's true, Dow Corning could be charged with a felony: filing false reports with a government agency. Meanwhile, Los Angeles County District Attorney Reiner has opened his own criminal investigation (box, page 38).

Manville and Robins, which both filed for Chapter 11, are the only role models for Dow Corning. Pfizer Inc. recently set up a mechanism for dealing with damage claims on its Shiley heart

DOW CORNING'S MOUNTING LEGAL RISKS

CRIMINAL CHARGES

Under federal criminal statutes and food and drug laws, Dow Corning and its executives could be charged with rigging or hiding data

GOVERNMENT ACTION

The company risks civil liability under food and drug laws for selling or shipping defective or mislabeled products. Fines could reach \$1 million, and the company could be charged

SHAREHOLDER SUITS

Dow Chemical and Corning could be liable for damages to shareholders if they are found to have misled investors about the safety of the implants

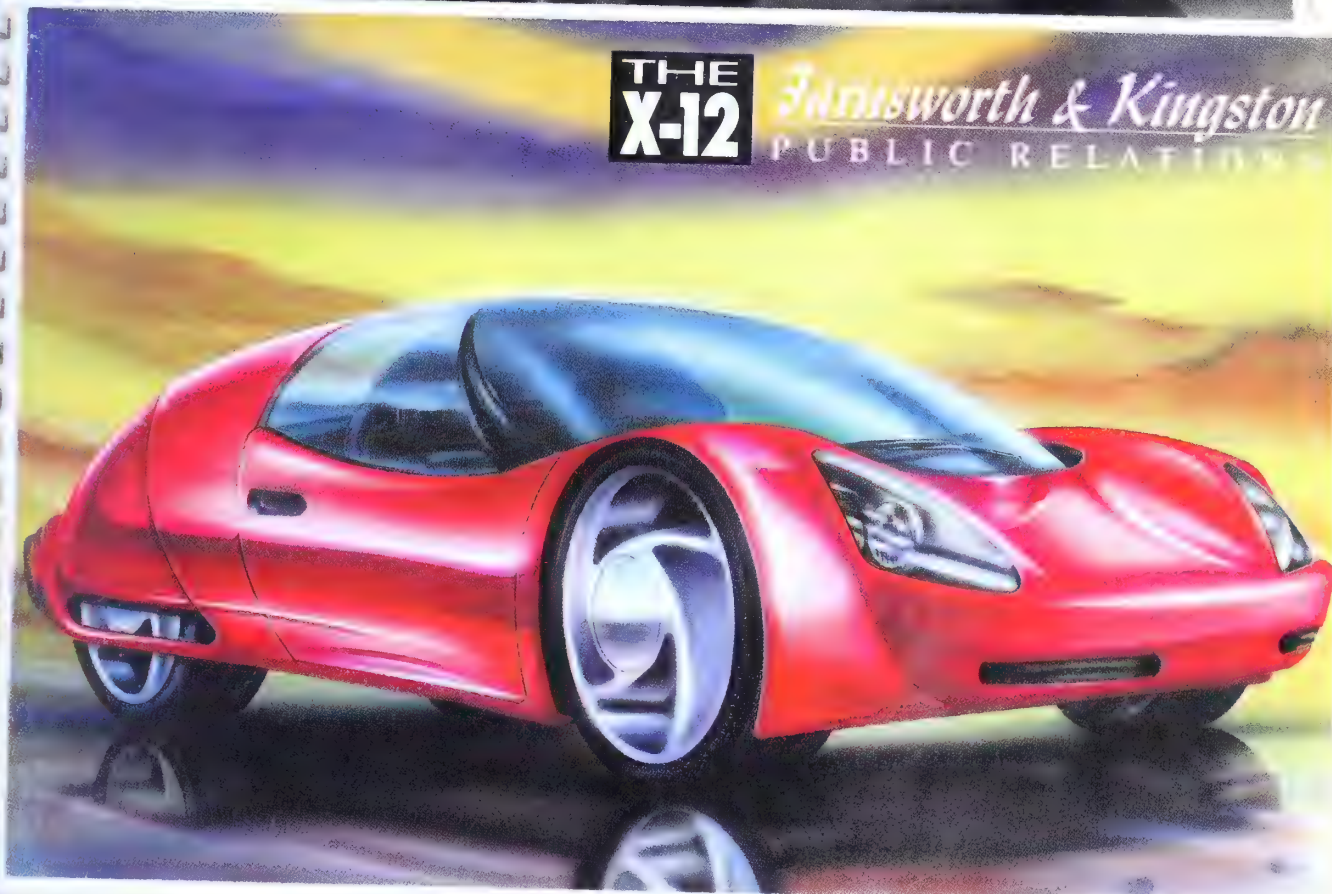
SUITS BY IMPLANT RECIPIENTS

Dow Corning has already lost several lawsuits against women claiming breast implant defects. In December, a San Francisco jury awarded \$7.3 million to Mariann Hopkins, who claimed Dow Corning knowingly sold her a defective implant. In 1984, a jury awarded \$1.7 million to a woman who claimed Dow Corning hid the risks of its implants



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valves. The company didn't set an upper limit on its liability, though its best guess is around \$200 million, including \$80 million for medical care and \$75 million for a research fund.

The Pfizer settlement seems to have caught the attention of Dow Corning's new CEO, Keith R. McKennon. He's not only promising full cooperation with the FDA but also is talking about funding

research and paying the medical bills of poor women whose implants must be removed. While it's probably too late to keep Dow Corning's name off the list of corporate liability disasters, such efforts could help restore both the company's reputation and the public's trust.

By Michele Galen, with John A. Byrne in New York, Tim Smart in Washington, and David Woodruff in Detroit

THE L.A. LAWMAN GUNNING FOR DOW CORNING

Ira Reiner isn't really the Hollywood type, though one day he did do lunch with *L.A. Law* co-creator Terry Louise Fisher. But from his perch as county prosecutor, the 56-year-old Los Angeles County District Attorney has gained his own national reputation for taking on corporate powerhouses, often moving in ahead of the federal government. In December, his troops won the first conviction of former Lincoln Savings & Loan head Charles H. Keating Jr. for fraudulently selling millions of dollars in worthless junk bonds.

Now, Reiner is grabbing the limelight again—but his reach may exceed his grasp. On Jan. 30, he began a criminal probe into whether Dow Corning Corp. concealed health risks associated with its silicone gel breast implants. The investigation is the first major test of a year-old California law for which Reiner lobbied vigorously. The measure, the toughest of its kind in the country, holds executives criminally liable for workplace conditions or product defects that cause harm to employees or consumers. Penalties include up to three years in the can. "There's no deterrent like a clank of a jail cell closing behind you," says Reiner. Dow Corning, which is cooperating with Reiner's office, says the investigation has no merit.

POLITICAL ASPIRATIONS. Locking up corporate criminals has been a constant goal of Reiner's since he was first elected DA in 1984. So far, his office has won more than 230 convictions against companies violating local environmental laws and sent 36 executives

to jail. Six others drew jail time for manslaughter when safety violations led to a worker's death. No other locality has even come close to Los Angeles in the number of managers that they've sent to jail, says Joseph A. Kinney, executive director of the National Safe Workplace Institute.

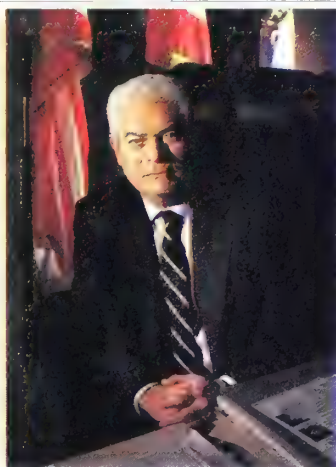
With a record like that, it's not surprising critics accuse Reiner of trying

to score political points. And he does aspire to higher office. Last year, Reiner lost the Democratic nomination to become California's Attorney General. This year, he faces three challengers in the June Democratic primary for Los Angeles DA. One of them, Head Deputy District Attorney Gilbert Garcetti, also charges that Reiner offered unnecessary plea bargains to bolster his conviction rate. A burly man who works in rolled up

shirt sleeves, Reiner waves away such criticism with a gruff "No comment."

One drawback of Reiner's high-profile style is that some cases end up as very public failures. Dow Corning could be one. Reiner's office would have to prove that the implant maker's executives knowingly concealed "a serious danger" and did so after the corporate-crime law's 1991 passage. "Moreover, there is a serious question as to whether this is an area that has been preempted by the federal government," says Warren L. Ettinger, the Los Angeles attorney who represents the company. But Reiner isn't sweating. He's betting on a splashy showing that even Hollywood might envy.

By Ronald Grover in Los Angeles



REINER'S REACH COULD EXCEED HIS GRASP ON THIS CASE

COMPUTERS

WILL ALPHA START A WAVE FOR DEC?

The company's latest revival plan hinges on this new, superfast chip

Digital Equipment Corp. seems to be on an endless search for a way out of its slump. Selling older computers and technology didn't work. Neither did cutting overhead at the payroll. So what's a \$14 billion company to do? Begin anew, and DEC plans to do just that. On Feb. 25, DEC is set to unveil its latest revival plan in the form of a tiny, much-ballyhooed computer chip called Alpha. Says Peter C. Graham, Alpha program business manager: "We're betting our future on Alpha."

A reduced instruction-set computer or RISC, chip, Alpha boasts awesome performance: It can process 150 million instructions per second (MIPS)—double that of any current RISC chip. It also will run all sorts of software, critical since DEC is counting on high-margin software sales to boost its bottom line.

Alpha will first appear in DEC's and other companies' computers early next year. DEC hopes that over the next few years Alpha-based machines will account for most of its revenues. Early reviews are promising. John L. Hennessy, chief scientist at rival MIPS Computer Systems Inc., labels Alpha "a tour de force."

AT A PRICE. But even a tour de force may not be enough in this hotly competitive market, which Alpha is entering late. RISC designs from IBM, Hewlett-Packard, MIPS, and Sun Microsystems are vying for computer-company endorsement. Sun has sold its design to companies making everything from notebook PCs to supercomputers. Others are pumping up their chips' speed. On Feb. 18, MIPS claimed its newest chip can do over 100 MIPS. A faster version is in the works. Since DEC's Alpha has been designed for speed, early versions will cost \$3,400 each—as much as some workstations.

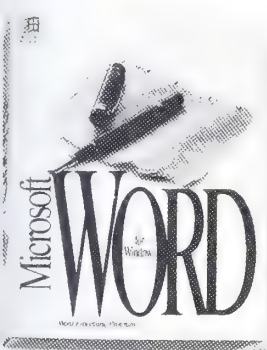
The bottom line: Alpha won't put DEC back on top. But it could stave off further customer defections. Mired in its worst slump ever, DEC's midrange computer sales are eroding so fast that it now faces an embarrassing second straight annual loss—an estimated \$13 million for the year ending June 30. Even with Alpha, "it'll be hard for DEC to rejuvenate," notes Morgan Stanley & Co. analyst Steven Milunovich. If he's right, count on another DEC revival plan.

By Gary McWilliams in Boston

WordPerfect users prefer Microsoft Word for Windows.

NSTL TEST RESULTS, DECEMBER 1991

	Word for Windows	WordPerfect for Windows
Preferred to use	79%	21%
Easier to learn	71%	21%
Easier to use	83%	13%
Would purchase	79%	21%



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BASS CAN'T GET COMFORTABLE AT HOLIDAY INNS

Will a lawsuit and a quality push rescue the brewer's investment?

Not so long ago, British brewer Bass PLC was confidently talking about pouring \$1 billion in cash into Holiday Inn. The goal? To spiff up the chain's aging network of 1,600 hotels. But now Bass is singing a different tune. A lawsuit it filed recently in U.S. District Court in New York claims the \$2.25 billion it spent to complete the buyout of the chain from Promus Companies Inc. was a bum deal.

The suit is the latest difficulty in Bass's attempt to diversify from beer to beds—an effort it accelerated in 1987 with its first investment in Holiday Inn Worldwide. By 1990, Bass had spent \$2.8 billion to fully acquire the hotel chain's brand name and franchising rights. It quickly launched a plan to stabilize and improve its core Holiday Inns, while emphasizing growth in its tony Crowne Plaza and cut-rate Express hotels.

But with the hotel business in a tailspin, those lofty goals aren't looking so good. The recession and higher airfares cut into demand. And the industry's building boom during the 1980s created a glut of rooms. "Holiday Inn is squeezed in a no-man's land," says Christopher W. Wickham, an analyst with Lehman Brothers International in London. He figures the chain is in a double bind: It has an uneven quality image with business travelers and charges room rates that some vacationers are reluctant to pay. A Bass spokesman disagrees: "The image perception of the brand is still very strong."

SOLD HIGH. Instead of being the bonanza Bass expected, Holiday Inn has become a drag on its bottom line. Revenue from Bass's hotel group fell 9.5%, to just under \$1 billion, in the fiscal year ended Sept. 30. Operating profit slumped 6.4% from the year earlier, to \$180 million (table). "Whether it's luck or genius, Promus sold at the absolute top of the lodging market," observes analyst Napoleon H.

Overton at Morgan Keegan & Co. in Memphis.

But Bass argues in its suit that Promus got top price because it withheld critical information. Neither company will discuss the suit. However, Graeme Eadie, an analyst at County NatWest Securities Ltd. in Edinburgh, Scotland, estimates that Bass wants some \$50 million to \$70 million from Promus.

The brewer contends that Promus failed to disclose an ongoing Federal Trade Commission probe into Holiday Clubs International, a now-defunct unit that arranged time-share vacations at Holiday Inn resorts. The suit also cites a dispute over whether Promus may open a hotel within a mile of San Francisco's Holiday Inn Union Square.

To try to recoup Bass's investment, Holiday Inn CEO Bryan D. Langton, Bass appointee, is boosting the brand's royalty fee the chain charges new franchisees from 4% to 5% of gross room revenue. Langton also has hired former Days Inns of America Inc. President Michael Leven and put him in charge of accelerating franchise signings.

DRASTIC STEPS. But consultants and competitors contend that Bass needs to take far more drastic steps to revitalize the chain's quality image. They think it ought to terminate 40% of the comparable 1,300 U.S. franchisees for falling below minimal standards. Bass says it "has been concentrating on changing the future of the business."

These days, franchisees who want to upgrade are stymied by the hotel chain's cash crunch. That's why Darryl G. LaPointe, president of Highpointe Hotel Corp. in Gulf Breeze, Fla., and a former president of the Holiday Inn franchise association, is asking the chain to set up a fund to provide capital for renovation.

But the recession has caused Bass to slow down capital spending plans, including the \$1 billion that it planned to put into Holiday Inn improvements. "We've moved the time scale out a bit," says the Bass spokesman. "We'll probably come out of that sort of level, but over a longer period."

Boosting profits at Holiday Inn may take a lot longer. That could be trouble for Bass, which is also dealing with the sagging fortunes of its beer business. Bass remains the No. 1 brewer in Britain. But British beer sales overall fell 6% last year, and Bass's sales dropped 3.7%. Worse, Bass reported that sales in its own pubs sank sharply 9% in the fourth quarter. Bass suffered another blow in late January when its largest Holiday Inn franchisee in the U.K. announced that it was converting its hotels to the Marriott nameplate. One large American franchisee says he's also mulling such a change. News that doesn't exactly fit with Bass's vision of a rapid Holiday Inn expansion. But Bass has learned, the rules of the hotel game can change quickly as the guests.

By Chuck Hawkins in Atlanta and Mark Maremont in London, with Alice Cuneo in San Francisco

HOLIDAY INN HEADACHES

LOUSY RETURN Bass PLC invested \$2.8 billion to buy Holiday Inn, which last year had worldwide operating profits of just \$180 million, down 6.4% from 1990

POOR PROPERTIES Some hotel-watchers say 40% of the 1,400 Holiday Inns in the U.S. are aging badly, with outdated decors, fraying carpets, and sagging beds

CREDIT CRUNCH Many banks are shying away from making loans to hotels for renovations. That may force Bass into acting as a banker to extend credit to its franchisees

OCCUPANCY SLUMP Thanks to a hotel-room glut and the recession, Holiday Inn's U.S. occupancy rate in 1991 edged down to 62%, vs. 63% in 1990

SOURCE: COMPANY REPORTS, ENR



PORTRAIT OF A QUITTER



About six years ago, I decided to stop smoking. So I tried cold turkey. It seemed to work for a while. But within three months, my wife caught me sneaking cigarettes out the bathroom window.

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In addition to the smoking cessation program, I was given a free kit. The kit includes tips on getting through the rough times and an audio tape for relaxation and motivation. My doctor is a big support as well. He even gave me a list of support groups I could attend.

Of course, Habitrol won't work for everyone. Only your doctor can determine if it's right for you. If you're pregnant or suffer from any serious disease, be sure to tell your doctor. The most common side effect is skin irritation.

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Habitrol™ (nicotine) Transdermal Therapeutic System is indicated for the relief of nicotine withdrawal symptoms. Habitrol treatment should be used as a part of a comprehensive behavioral smoking cessation program.

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Use of Habitrol systems is contraindicated in patients with hypersensitivity to or allergy to nicotine or to any of the components of the therapeutic system.

WARNINGS

Nicotine from any source can be toxic and addictive. Smoking causes lung cancer, heart disease, emphysema, and may adversely affect the fetus and the pregnant woman. For any smoker, with or without concomitant disease or pregnancy, the risk of nicotine replacement in a smoking cessation program should be weighed against the hazard of continued smoking while using Habitrol systems, and the likelihood of achieving cessation of smoking without nicotine replacement.

Pregnancy Warning

Tobacco smoke, which has been shown to be harmful to the fetus, contains nicotine, hydrogen cyanide, and carbon monoxide. Nicotine has been shown in animal studies to cause fetal harm. It is therefore presumed that Habitrol treatment can cause fetal harm when administered to a pregnant woman. The effect of nicotine delivery by Habitrol systems has not been examined in pregnancy (see PRECAUTIONS, Other Effects). Therefore, pregnant smokers should be encouraged to attempt cessation using educational and behavioral interventions before using pharmacological approaches. If Habitrol therapy is used during pregnancy, or if the patient becomes pregnant while using Habitrol treatment, the patient should be apprised of the potential hazard to the fetus.

Safety Note Concerning Children

The amounts of nicotine that are tolerated by adult smokers can produce symptoms of poisoning and could prove fatal if Habitrol systems are applied or ingested by children or pets. Used 21 mg/day systems contain about 60% (32 mg) of their initial drug content. Therefore, patients should be cautioned to keep both used and unused Habitrol systems out of the reach of children and pets.

PRECAUTIONS

General

The patient should be urged to stop smoking completely when initiating Habitrol therapy (see DOSAGE AND ADMINISTRATION). Patients should be informed that if they continue to smoke while using Habitrol systems, they may experience adverse effects due to peak nicotine levels higher than those experienced from smoking alone. If there is a clinically significant increase in cardiovascular or other effects attributable to nicotine, the Habitrol dose should be reduced or Habitrol treatment discontinued (see WARNINGS). Physicians should anticipate that concomitant medications may need dosage adjustment (see Drug Interactions).

The use of Habitrol systems beyond 3 months by patients who stop smoking should be discouraged because the chronic consumption of nicotine by any route can be harmful and addictive.

Allergic Reactions: In a 6-week open label dermal irritation and sensitization study of Habitrol systems, 22 of 220 patients exhibited definite erythema at 24 hours after application. Upon rechallenge, 3 patients exhibited mild-to-moderate contact allergy. Patients with contact sensitization should be cautioned that a serious reaction could occur from exposure to other nicotine-containing products or smoking. In the efficacy trials, erythema following system removal was typically seen in about 17% of patients, some edema in 4%, and droopouts due to skin reactions occurred in 6% of patients.

Patients should be instructed to promptly discontinue the Habitrol treatment and contact their physicians if they experience severe or persistent local skin reactions at the site of application (e.g., severe erythema, pruritus or edema) or a generalized skin reaction (e.g., urticaria, hives, or generalized rash).

Skin Disease: Habitrol systems are usually well tolerated by patients with normal skin, but may be irritating for patients with some skin disorders (atopic or eczema).

Cardiovascular or Peripheral Vascular Diseases: The risks of nicotine replacement in patients with certain cardiovascular and peripheral vascular diseases should be weighed against the benefits of including nicotine replacement in a smoking cessation program for them. Specifically, patients with coronary heart disease (history of myocardial infarction and/or angina pectoris), serious cardiac arrhythmias, or vasospastic diseases (Buerger's disease, Prinzmetal's variant angina) should be carefully screened and evaluated before nicotine replacement is prescribed.

Tachycardia occurring in association with the use of Habitrol treatment was reported occasionally. If serious cardiovascular symptoms occur with Habitrol treatment, it should be discontinued.

Habitrol treatment should generally not be used in patients during the immediate post-myocardial infarction period, patients with serious arrhythmias and patients with severe or worsening angina pectoris.

Renal or Hepatic Insufficiency: The pharmacokinetics of nicotine have not been studied in the elderly or in patients with renal or hepatic impairment. However, given that nicotine is extensively metabolized and that its total system clearance is dependent on liver blood flow, some influence of hepatic impairment on drug kinetics (reduced clearance) should be anticipated. Only severe renal impairment would be expected to affect the clearance of nicotine or its metabolites from the circulation (See CLINICAL PHARMACOLOGY, Pharmacokinetics).

Endocrine Diseases: Habitrol treatment should be used with caution in patients with hyperthyroidism, pheochromocytoma, or insulin-dependent diabetes, since nicotine causes the release of catecholamines by the adrenal medulla.

Peptic Ulcer Disease: Nicotine delays healing in peptic ulcer disease; therefore, Habitrol treatment should be used with caution in patients with active peptic ulcers and only when the benefits of including nicotine replacement in a smoking cessation program outweigh the risks.

Accelerated Hypertension: Nicotine constitutes a risk factor for development of malignant hypertension in patients with accelerated hypertension. Therefore, Habitrol treatment should be used with caution in these patients and only when the benefits of including nicotine replacement in a smoking cessation program outweigh the risks.

Information for Patients

A patient instruction sheet is included in the package of Habitrol systems dispensed to the patient. It contains important information and instructions on how to use and dispose of Habitrol systems properly. Patients should be encouraged to ask questions of the physician and pharmacist. Patients must be advised to keep both used and unused systems out of the reach of

children and pets.

Drug Interactions

Smoking cessation, with or without nicotine replacement, may alter the pharmacokinetics of certain concomitant medications.

May Require a Decrease in Dose at Cessation of Smoking

Acetylcholinesterase inhibitors
insulin
penitazocine, propranolol
theophylline

Insulin

Adrenergic antagonists
(e.g., prazosin, labetalol)

May Require an Increase in Dose at Cessation of Smoking

Adrenergic agonists
(e.g., isoproterenol, phenylephrine)

Carcinogenesis, Mutagenesis, Impairment of Fertility

Nicotine itself does not appear to be a carcinogen in laboratory animals. However, nicotine and its metabolites increased the incidence of tumors in the cheek pouches of hamsters and forestomach of F344 rats, respectively, when given in combination with tumor-initiators. One study, which could not be replicated, suggested that cotinine, the primary metabolite of nicotine, may cause lymphoreticular sarcoma in the large intestine in rats.

Nicotine and cotinine were not mutagenic in the Ames *Salmonella* test. Nicotine induced repairable DNA damage in an *E. coli* test system. Nicotine was shown to be genotoxic in a test system using Chinese hamster ovary cells. In rats and rabbits, implantation can be delayed or inhibited by reduction in DNA synthesis that appears to be caused by nicotine. Studies have shown a decrease in litter size in rats treated with nicotine during gestation.

Pregnancy Category D (see WARNINGS)

The harmful effects of cigarette smoking on maternal and fetal health are clearly established. These include low birth weight, an increased risk of spontaneous abortion, and increased perinatal mortality. The specific effects of Habitrol treatment on fetal development are unknown. Therefore, pregnant smokers should be encouraged to attempt cessation using educational and behavioral interventions before using pharmacological approaches.

Spontaneous abortion during nicotine replacement therapy has been reported as with smoking, nicotine as a contributing factor cannot be excluded.

Habitrol treatment should be used during pregnancy only if the likelihood of smoking cessation justifies the potential risk of use of nicotine replacement by the patient, who may continue to smoke.

Teratogenicity

Animal Studies: Nicotine was shown to produce skeletal abnormalities in the offspring of mice when given doses toxic to the dams (25 mg/kg/day IP or SC).

Human Studies: Nicotine teratogenicity has not been studied in humans except as a component of cigarette smoke (each cigarette smoking delivers about 1 mg of nicotine). It has not been possible to conclude whether cigarette smoking is teratogenic to humans.

Other Effects

Animal Studies: A nicotine bolus (up to 2 mg/kg) to pregnant rhesus monkeys caused acidosis, hypercarbia, and hypotension (fetal and maternal concentrations were about 20 times those achieved after smoking 1 cigarette in 5 minutes). Fetal breathing movements were reduced in the fetal lamb after intravenous injection of 0.25 mg/kg nicotine to the ewe (equivalent to smoking 1 cigarette every 20 seconds for 5 minutes). Uterine blood flow was reduced about 30% after infusion of 0.1 mg/kg/min nicotine for 20 minutes to pregnant rhesus monkeys (equivalent to smoking about 6 cigarettes every minute for 20 minutes).

Human Experience: Cigarette smoking during pregnancy is associated with an increased risk of spontaneous abortion, low-birth-weight infants and perinatal mortality. Nicotine and carbon monoxide are considered the most likely mediators of these outcomes. The effects of cigarette smoking on fetal cardiovascular parameters have been studied near term. Cigarettes increased fetal aortic blood flow and heart rate, and decreased uterine blood flow and fetal breathing movements. Habitrol treatment has not been studied in pregnant humans.

Labor and Delivery

Habitrol systems are not recommended to be left on during labor and delivery. The effects of nicotine on the mother or the fetus during labor are unknown.

Nursing Mothers

Caution should be exercised when Habitrol therapy is administered to nursing women. The safety of Habitrol treatment in nursing infants has not been examined. Nicotine passes freely into breast milk; the milk-to-plasma ratio averages 2:9. Nicotine is absorbed orally. An infant has the ability to clear nicotine by hepatic first-pass clearance; however, the efficiency of removal is probably lowest at birth. The nicotine concentrations in milk can be expected to be lower with Habitrol treatment when used as directed than with cigarette smoking, as maternal plasma nicotine concentrations are generally reduced with nicotine replacement. The risk of exposure of the infant to nicotine from Habitrol systems should be weighed against the risks associated with the infant's exposure to nicotine from continued smoking by the mother (passive smoke exposure and contamination of breast milk with other components of tobacco smoke) and from Habitrol systems alone or in combination with continued smoking.

Pediatric Use

Habitrol systems are not recommended for use in children because the safety and effectiveness of Habitrol treatment in children and adolescents who smoke have not been evaluated.

Geriatric Use

Forty-eight patients over the age of 60 participated in clinical trials of Habitrol therapy. Habitrol therapy appeared to be as effective in this age group as in younger smokers.

ADVERSE REACTIONS

Assessment of adverse events in the 792 patients who participated in controlled clinical trials is complicated by the occurrence of GI and CNS effects of nicotine withdrawal as well as nicotine excess. The actual incidences of both are confounded by concurrent smoking by many of the patients. In the trials, when reporting adverse events, the investigators did not attempt to identify the cause of the symptoms.

Topical Adverse Events

The most common adverse event associated with topical nicotine is a short-lived erythema, pruritus, or burning at the application site, which was seen at least once

in 35% of patients on Habitrol treatment in the clinical trials. Local erythema after system removal was noted at least once in 17% of patients and local edema in 4%. Erythema generally resolved within 24 hours. Cutaneous hypersensitivity (contact sensitization) occurred in 2% of patients on Habitrol treatment (see PRECAUTIONS, Allergic Reactions).

Probably Causally Related

The following adverse events were reported more frequently in Habitrol-treated patients than in placebo-treated patients or exhibited a dose response in clinical trials:
Digestive system - Diarrhea*, dyspepsia*
Mouth/Tooth disorders - Dry mouth
Musculoskeletal system - Arthralgia*, myalgia*
Nervous system - Abnormal dreams†, somnolence†

Frequencies for 21 mg/day system

*Reported in 3% to 9% of patients

†Reported in 1% to 3% of patients

Unmarked if reported in < 1% of patients

Causal Relationship Unknown

Adverse events reported in Habitrol- and placebo-treated patients at about the same frequency in clinical trials are listed below. The clinical significance of the association between Habitrol treatment and these events is unknown, but they are reported as alerting information for the clinician.
Body as a whole - Allergy†, back pain†
Cardiovascular system - Hypertension†
Digestive system - Abdominal pain†, constipation†, nausea†, vomiting†
Nervous system - Dizziness*, concentration impaired†, headache (17%), insomnia†
Respiratory system - Cough increased†, pharyngitis†, sinusitis†
Urogenital system - Dysmenorrhea†

Frequencies for 21 mg/day system

*Reported in 3% to 9% of patients

†Reported in 1% to 3% of patients

Unmarked if reported in < 1% of patients

DRUG ABUSE AND DEPENDENCE

Habitrol systems are likely to have a low abuse potential based on differences between it and cigarettes in four characteristics commonly considered important in contributing to abuse: much slower absorption, much smaller fluctuations in blood levels, lower blood levels of nicotine, and less frequent use (1 or once daily).

Dependence on nicotine polacrilex chewing gum replacement therapy has been reported. Such dependence might also occur from transference to Habitrol system of tobacco-based nicotine dependence. The use of the system beyond 3 months has not been evaluated and should be discouraged.

To minimize the risk of dependence, patients should be encouraged to withdraw gradually from Habitrol treatment after 4 to 8 weeks of usage. Recommended dose reduction is to progressively decrease the dose every 2 to 4 weeks (see DOSAGE AND ADMINISTRATION).

OVERDOSEAGE

The effects of applying several Habitrol systems simultaneously or of swallowing Habitrol systems are unknown (see WARNINGS, Safety Note Concerning Children).

The oral LD₅₀ for nicotine in rodents varies with species but is in excess of 24 mg/kg, death is due to respiratory paralysis. The oral minimum lethal dose of nicotine in dogs is greater than 5 mg/kg. The oral minimum acute lethal dose for nicotine in human adults is reported to be 40 to 60 mg (<1 mg/kg).

Two or three Habitrol 30 cm² systems in capsules led to dogs weighing 8-17 kg were emetic, but did not produce any other significant clinical signs. The administration of these patches corresponds to about 6-17 mg/kg of nicotine.

Signs and symptoms of an overdose of Habitrol systems would be expected to be the same as those of acute nicotine poisoning including: pallor, cold sweat, nausea, salivation, vomiting, abdominal pain, diarrhea, headache, dizziness, disturbed hearing and vision, tremor, mental confusion, and weakness. Prostration, hypotension, and respiratory failure may ensue with large overdoses. Lethal doses produce convulsions quickly and death follows as a result of peripheral or central respiratory paralysis or, less frequently, cardiac failure.

Overdose From Topical Exposure

The Habitrol system should be removed immediately if the patient shows signs of overdose and the patient should seek immediate medical care. The skin surface may be flushed with water and dried. No soap should be used since it may increase nicotine absorption. Nicotine will continue to be delivered into the blood stream for several hours (see CLINICAL PHARMACOLOGY, Pharmacokinetics) after removal of the system because of a depot of nicotine in the skin.

Overdose From Ingestion

Persons ingesting Habitrol systems should be referred to a health care facility for management. Due to the possibility of nicotine-induced seizures, activated charcoal should be administered. In unconscious patients with a secure airway, instill activated charcoal via nasogastric tube. A saline cathartic or sorbitol added to the first dose of activated charcoal may speed gastrointestinal passage of the system. Repeated doses of activated charcoal should be administered as long as the system remains in the gastrointestinal tract since it will continue to release nicotine for many hours.

Management of Nicotine Poisoning

Other supportive measures include diazepam or barbiturates for seizures, atropine for excessive bronchial secretions or diarrhea, respiratory support for respiratory failure, and vigorous fluid support for hypotension and cardiovascular collapse.

Safety and Handling

Habitrol systems can be a dermal irritant and can cause contact sensitization. Although exposure of health care workers to nicotine from Habitrol systems should be minimal, care should be taken to avoid unnecessary contact with active systems. If you do handle active systems, wash with water alone, since soap may increase nicotine absorption. Do not touch your eyes.

Disposal

When the used system is removed from the skin, it should be folded over and placed in the protective pouch which contained the new system. The used system should be immediately disposed of in such a way to prevent its access by children or pets. See patient information for further directions for handling and disposal.

How to Store

Do not store above 86°F (30°C) because Habitrol systems are sensitive to heat. A slight discoloration of the system is not significant.

Do not store unpouched. Once removed from the protective pouch, Habitrol systems should be applied promptly since nicotine is volatile and the system may lose strength.

CAUTION: Federal law prohibits dispensing without prescription.

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DIXIE WOOLUM, A CINDERELLA (W.VA.) WIDOW: A PROMISE SOON TO BE BROKEN?

THE COAL MINERS' COLLAPSING MEDICAL KITTY

Unless Congress acts, retirees face imminent cutoff of health benefits

Dixie Woolum buried her husband, Jimmy, just three months after he retired from the coalfields near their home in Cinderella, W. Va. After 45 years in the mines, Jimmy wound up with black lung disease, lung cancer—and a promise: As a member of the United Mine Workers of America, he was entitled to lifetime health care for himself and his family. “He said if anything ever happened to him, we’d be taken care of,” says the 72-year-old widow. So much for promises. As early as March 1, the 118,000 UMWA retirees may receive a letter telling them that their health cards aren’t worth the plastic they’re made from. Why? During the past 10 years, annual medical claims have doubled, to 1991’s total of \$243 million. But the number of companies contributing to the UMWA retiree benefit fund has dropped from about 2,000 in 1950 to 300 today. The letter is set to go out only because the UMWA’s most recent legal maneuver failed. The union had sued contributing companies, demanding that they double contributions to help pay off the \$124 million in unpaid retiree medical bills. But on Feb. 13, a federal judge in Washington,

D.C., refused to order the payments.

Now, the UMWA is appealing to another authority: Congress. The union is pinning its hopes on legislation introduced in November by Senator Jay Rockefeller (D-W. Va.) that would spread the retiree-benefit cost among both union and non-union companies. Rockefeller’s proposal: An industrywide levy of 75¢ per hour worked, which would be paid directly into a new retiree-benefit fund. Rockefeller and a supporting cast of pro-union, coal-state senators are trying to append the plan onto the Democratic tax bill that the Senate Finance Committee begins drafting on Feb. 25.

The Rockefeller proposal is bound to set off a brawl. Rockefeller’s opponents are vowing not to let the coal-company

tax slip by. “This is some of the most ludicrous legislation we’ve seen come down the pike in a long time,” says a spokesman for Sun Coal Co. in Knoxville, Tenn. If Congress doesn’t act to bail out the funds, counters UMWA President Richard Trumka, he’ll “pull out all the stops”—including staging massive strikes by coal miners.

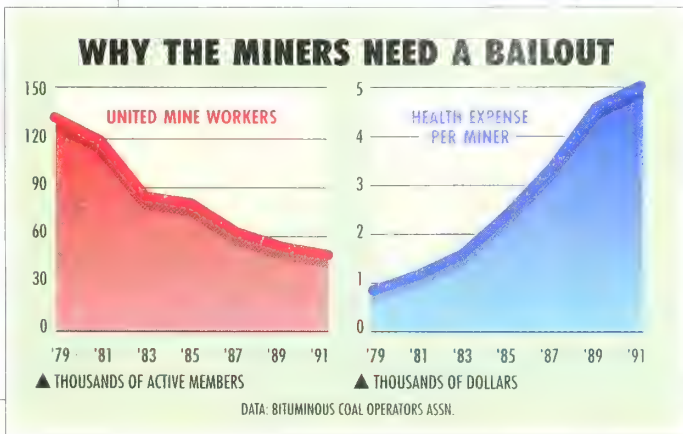
RENEGING? The \$22 billion coal business isn’t the only U.S. industry stuck with this problem. More than 5 million retirees now rely on company-sponsored health plans for medical coverage, and 40% of them are too young to be converted to medicare. Some companies, such as aerospace supplier GenCorp Inc. in Fairlawn, Ohio, and General Motors Corp. have tried hiking retiree co-payments, hoping to offset the expense of providing coverage. But that landed both companies in court, defending charges that they had reneged on coverage promises. The cases are pending.

For retired miners, the benefits shortfall has been exacerbated by profit problems in the coal business. Members of the Bituminous Coal Operators’ Assn. (BCOA), the industry’s primary collective-bargaining group, have long paid UMWA retirees’ medical bills as part of their national contract. But overproduction of coal, resulting in big price declines, prompted many companies to work outside the national contract, shrugging off the UMWA retiree liability despite binding agreements to pay into the fund. Forty years ago, when UMWA hero John L. Lewis signed the benefit pact with the BCOA, that group represented 80% of the industry. These days, it’s 30%.

For retired miner Homer Eckley of Cadiz, Ohio, the issue is vital. A UMWA member, Eckley retired in 1984. Four years later, as he underwent radiation treatment for prostate cancer, his employer, Youghiogeny & Ohio Coal Co., refused to pay the bills. “After 33 years working [in the mines], they threw me out,” Eckley laments. The UMWA fund picked up his coverage and eventually paid more than \$10,000 in bills that Eckley couldn’t have covered with his \$407 monthly pension and medicare payments.

Eckley has more therapy to look forward to. More bills, too. “We’d be willing to fight anyone” to keep the UMWA coverage, says Homer’s wife, Emily. If the funds don’t become solvent, they may have to do just that—or watch their benefits blow away like so much coal dust.

By Maura Melton in Pittsburgh, with Susan B. Garland in Washington



EDITED BY HARRIS COLLINGWOOD

READY TO TRAVEL?

Is the "global marketplace" more than a catchphrase for U.S. managers? Maybe not, judging from the results of a survey of 148 middle managers by Dunhill Personnel System Inc. It suggests managers are in no rush to learn another language, visit another country, or get a fresh perspective on business. Here are some findings:

How essential are foreign-language skills to your career? Percent

Not essential now, but maybe in the future **40.3%**

Not important now or in the future **16.9**

A must **6.5**

What sources do you use in investigating global business issues?

U.S. magazines **60.0**

Television **57.1**

International publications **21.4**

What factor is most important in becoming a good global manager?

Understanding a foreign culture **45.2**

Time spent in a particular country **0.0**

DATA: DUNHILL PERSONNEL SYSTEM INC.

TWO CABLE GIANTS BUY INTO FIBER OPTICS

► While telephone companies are agitating to get in the cable-television business, two giant cable companies on Feb. 19 announced they were buying Teleport Communications Group from Merrill Lynch. Teleport owns fiber-optic networks that compete with local phone companies. Tele-Communications agreed to buy a 49.9% stake, and Cox Enterprises said it was considering boosting its stake to 50.1% from 12.5%.

MILKEN'S BIG DEAL FROM THE BIG HOUSE

► Michael Milken isn't going to let a little thing like prison stop him from cutting deals.

The convicted felon on Feb. 14 reached a tentative \$1.3 billion settlement of civil suits filed by his former employer, Drexel Burnham Lambert, regulators, and individuals.

While the final agreement must still be signed, the pact requires Milken to throw in \$500 million—\$190 million in cash and \$310 million from his stake in partnerships set up for Drexel employees. As now proposed, the former junk-bond king will have three years to sell partnership assets while serving the remainder of his sentence in a California federal prison. The deal leaves Milken with millions of dollars in personal and family assets.

LOWERING THE GAVEL ON VICTOR POSNER

► Another financier who's making legal news is Victor Posner. After reading reports filed by court-appointed directors of Posner's holding company, DWG, Cleveland federal court Judge Thomas Lambros has temporarily removed Posner as chief executive.

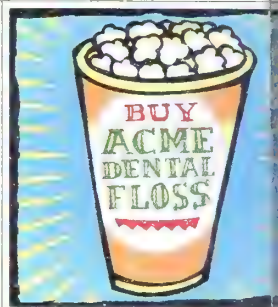
Lambros acted after the directors alleged that Posner, who was paid \$6 million last year, forced an ailing DWG to absorb millions of dollars of charges from other Posner companies even as he ran up lavish expenses on DWG's tab. "Mr. Posner's actions constitute a confiscation of the investment of every other

'HEY, LET'S GO SEE COCA-COLA III'

There's no escape. On your way to the movie theater, billboards assail your eyes, insipid jingles pour out of the radio. As you wait to buy your tickets, someone hands you a flyer from a new nail salon. Placards promoting coming attractions loom over you in the lobby.

You buy your soft drink and popcorn and take your seat in the cool half-light of the theater, thinking you're finally free of the incessant chatter of advertising. But you're wrong. Your popcorn carton comes complete with three or four ads, thanks to those geniuses at Cinemed. So fiendish are the folks who dreamed this up that they actually brag to potential advertisers that you, the innocent moviegoer, can't throw away the ad until you've finished your popcorn. Moreover, the lights won't go down for another 15 minutes or so. Face it, you poor slob, you're stuck.

At last, the theater darkens. And they show a commercial



shareholder in DWG," Lambros wrote in ordering Posner to put much of his 1991 salary in escrow and account for his expenses. Posner's lawyer filed for a stay until a Feb. 24 court hearing.

REVCO TOSSES ITSELF A LIFE PRESERVER

► The twists and turns in the bidding for Revco DS may be just about over. A plan filed by management of the drug-store chain and backed by Chicago-based investors Zell/Chilmark Fund LP looks like the winner, knocking out Jack Eckerd Corp., Revco's Florida-based rival. That means

Revco, which in 1988 became the first big leveraged-buyout to go bankrupt, will likely survive as an independent company. It even might go public again by springtime.

Under the Revco plan, equity holders would get nothing for their stake, and junior debtholders would receive just pennies on the dollar. Even some secured creditors, such as Revco's banks, would get close to their original claim.

HUGHES TURNS TO IBM FOR A NEW PILOT

► Hughes Aircraft is determined to wean itself away from Pentagon contracts. As part of that effort, on Feb. 19, the General Motors subsidiary named C. Michael Armstrong as its new chairman, effective at the end of March. Armstrong, currently chairman of IBM World Trade, has been considered a possible successor to IBM CEO John Akers.

Hughes's goal is to increase commercial work to 50% of sales by the end of the decade, compared with 30% in 1991. Hughes is also a leading maker of commercial satellites, Hughes also plans to put its own line of cellular phones in GM cars.



WHO WANTS A MIDDLE-CLASS TAX CUT? POLITICIANS, THAT'S WHO

The voters of New Hampshire made one thing pretty clear on Feb. 18: People are fed up with politics-as-usual. But judging by the squabbling over an election-year tax cut, politicians in Washington still haven't gotten the message that they must deal with the nation's serious economic problems. As President Bush and lawmakers fight over details of a bill that's supposed to help end the recession and foster growth, political posturing—not economics—is the driving force. The result, once the name-calling and finger-pointing is over, will be a modest tax bill that offers little help to the economy. The ball is now in the Democrats' court.

On Feb. 19, the House majority caucus convened but took no action on a draft bill that would offer working people a small tax cut, raise taxes for couples earning more than \$150,000, and index capital gains for inflation. The bill also contains some highly technical provisions that provide special-interest breaks to the real estate industry and takeover artists. And it penalizes corporations that pay officers more than \$1 million a year. But the caucus deadlocked after members objected to some provisions, including a one-percentage-point cut in the corporate tax rate.

QUARTER GIVEN. Whatever the caucus decides, the measure is veto bait. Budget Director Richard G. Darman attacked it as politically motivated, sneering that the plan would give middle-class families "25¢ a day for two years." He didn't mention that Bush only offered 41¢ a day for a family with two children. And that was before Bush disowned his own bill, demanding that Congress not even consider it until later. Bush has spawned much of the tax cynicism by treating his own proposals as throwaway campaign lines. The President promised middle-class relief in his State of the Union speech and proposed paying for it and other tax breaks with a laundry list of tax hikes. But under pressure from challenger

Patrick J. Buchanan, Bush ditched the revenue-raisers. That left him unable to pay for his proposed hike in the personal exemption, so Bush walked away from that promise, too, only to be blasted again by Buchanan for tax "betrayal."

While Bush flounders in search of a tax policy, congressional Democrats are pursuing the "fairness" issue. House Ways & Means Committee Chairman Dan Rostenkowski (D-Ill.) dusted off a 1991 proposal that would give workers a temporary \$200 income tax credit against their Social Security payroll tax while raising tax rates for the wealthy. Senate Majority Leader

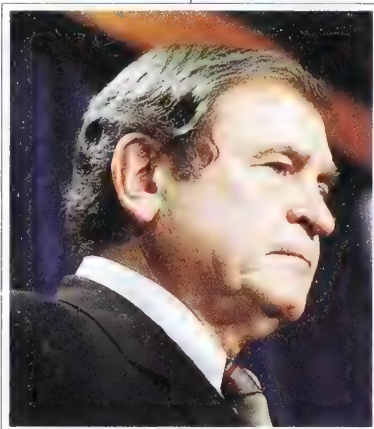
George J. Mitchell (D-Me.) is one-upping the House. He wants any middle-class tax cut to be permanent. The Senate Finance panel, which will begin drafting a tax bill in a couple of weeks, will go further to help what Democratic candidates call "the forgotten middle class" by including sweeter provisions for Individual Retirement Accounts.

NO PANDERING, PLEASE. For all the energy going into this jockeying, voters seem too concerned with such issues as health care and job security to pay much attention. Polls show that middle-class voters don't expect a tax cut and don't think it would do much good. New Hampshire Democratic winner Paul Tsongas says if he were President, he would veto middle-class tax relief. Says Democratic analyst William Galston: "There

isn't any overwhelming public pressure for a middle-class tax cut. The country is divided between those who wouldn't kick the money out of bed and those who want Congress to use the money for something else." Instead, says Galston, "the undercurrent is that people don't want to be pandered to."

Election-year pandering, however, is a deeply ingrained habit. The success of New Hampshire's insurgents suggests that it may be the wrong thing to do in 1992. But back in the swamps of Washington, old habits die hard.

By Howard Gleckman in Washington



ROSTENKOWSKI BACKS A \$200 CREDIT

HOSPITAL WRAPUP

HEALTH CARE

Despite an all-out push by Democratic congressional leaders, health care reform is unlikely to be enacted this year. The Democrats hope to get all of their major players on Capitol Hill lined up behind a plan similar to the "play or pay" scheme drafted by Senate Majority Leader George J. Mitchell (D-Me.). It would require businesses that don't provide employees with health benefits to pay a tax that would fund government-sponsored insurance. Consensus in the House appears within reach. But in the Senate, Finance Committee Chairman Lloyd Bentsen (D-Tex.), who looks after the

interests of small business, could be a major impediment. And any bill that clears the Hill would likely face a veto.

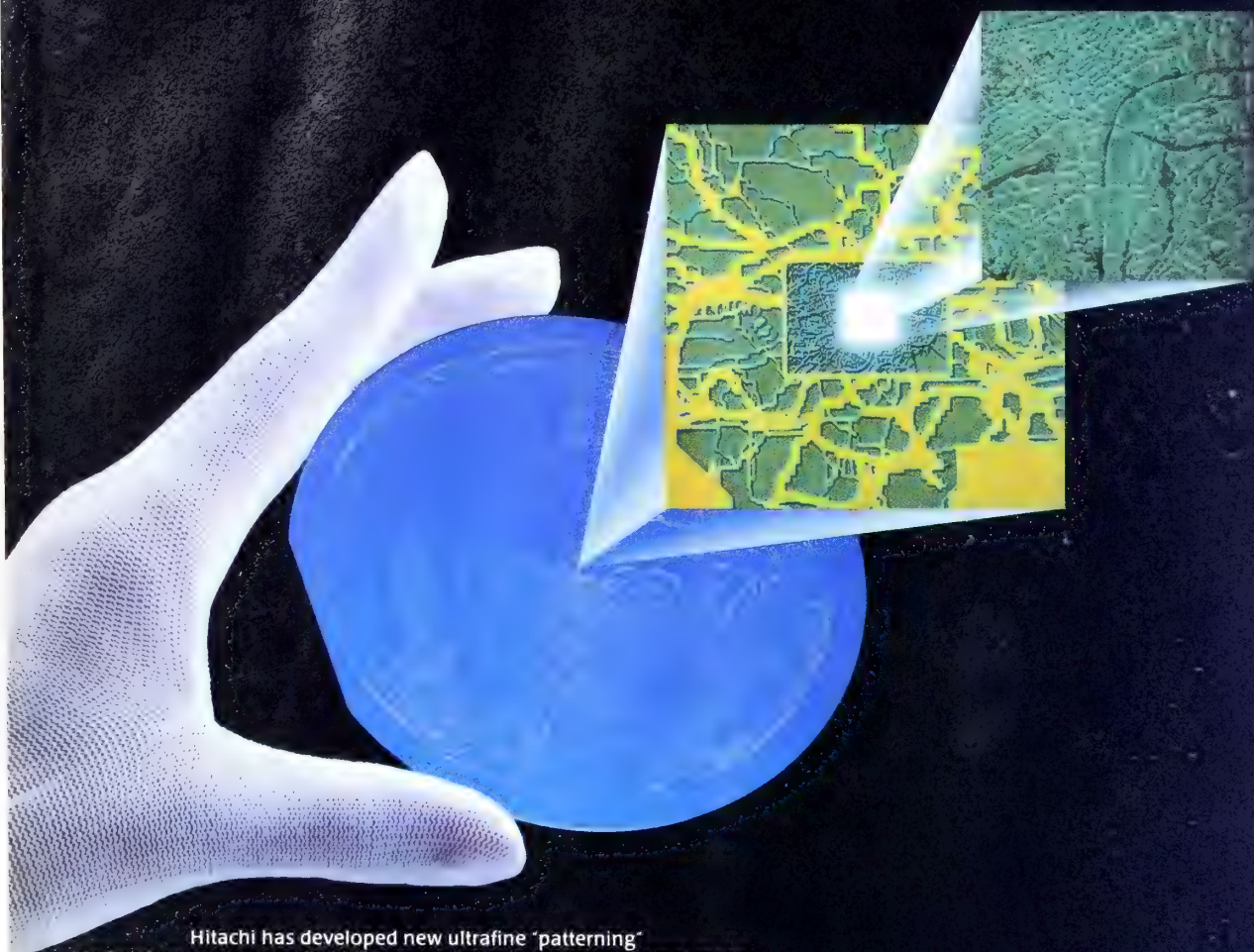
PEOPLE

Retired Air Force General James A. Abrahamson appears headed for the top job at NASA. Abrahamson, an executive vice-president at Hughes Aircraft Co., is a former top NASA official who once headed the Star Wars program... The White House can't persuade National Highway Traffic Safety Administrator Jerry R. Curry to abandon his effort to head the Federal Aviation Administration. But the Senate, unhappy with his record at NHTSA, is determined to kill the nomination.

BANKS

A staff review of the economics of bank mergers is causing turmoil at the Federal Reserve. The Fed is urging banks that serve overlapping markets to combine, in hopes of producing a more efficient financial system. But staff antitrust economists have found that cost savings from such mergers are realized slowly, if ever. A story about the internal review in *American Banker*, a trade newspaper, set off a search for leakers at the central bank. Although there has been no public word of any disciplinary action, a Federal Reserve official says: "Confessions were obtained."

Reducing an entire city map to the width of a human hair . . .



Hitachi has developed new ultrafine "patterning" technology — one use of which has created extremely small street maps.

Hitachi's new electron beam lithography technology has created one of the world's smallest street maps, with implications for computerization and miniaturization that open broad new horizons for future semiconductor and product technology. It's the kind of scientific advancement that could make many future computer and electronic products much smaller, faster, and more versatile.

Using new ultrafine "patterning" technology

used in producing semiconductors, Hitachi Research and Development engineers have created detailed maps of London and Kyoto, on a scale of 1 to 100,000,000. That's like reducing the Earth to about the size of a baseball. The technology allows fabrication in widths as small as 0.1 micron.

And Hitachi is also putting different imaging technology to work for everyday business, with the HIFAX CFX-1 facsimile/copier. Incorporating

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These are just two examples of how Hitachi's
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annual commitment to R&D are helping advance
the well-being of everyday life through science
and technology.

*US\$3,480 million; net R&D expenditures for the year ending March 31, 1991
US\$1 = ¥141

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AFTER YELTSIN'S STRONG MEDICINE, A FEW TWITCHES OF LIFE

One positive sign: Rubles are finally worth saving

At a busy state food store in the ancient Russian city of Yaroslavl, shelves that were bare just six weeks ago now are lined with beef, butter, sausage, and wine. At sidewalk sales outside former KGB headquarters in downtown Moscow, thousands earn extra cash hawking everything from Bic pens to brassieres. And in St. Petersburg, black marketeers are getting unusually stingy in their back-alley currency deals. They now offer only 80 rubles to a dollar—down from 135 a few weeks ago.

Six weeks after Russian President Boris Yeltsin subjected Russia's moribund economy to shock therapy, some surprising signs of life are appearing. Prices, which soared as much as 20 times after the Yeltsin move, now appear to be leveling off. For some goods, such as flour, eggs, and cream, they are even dropping. And instead of rioting, as some feared, Russian citizens have turned to trading *en masse* to ease their financial woes, thanks in part to a Feb. 1 Yeltsin decree that encourages open sales of almost everything.

Although it's too soon to pronounce Yeltsin's plan a success, one important sign of confidence is the strengthening of the ruble. After plummeting dramatically against the dollar in December, the ruble has strengthened sharply since Jan. 1. At the weekly Moscow currency exchange, the ruble has firmed from 230 to a dollar—or half a cent—to 170 on Feb. 18.

GETTING TOUGH. Entrepreneurs are snapping up rubles that just a few weeks ago were considered all but worthless. They want to build up ruble reserves to invest in the state-owned properties, including 42,000 retail outlets due on the market by yearend. Notes Levon Zolotov, a dealer on the



■ FOOD IS FINDING ITS WAY BACK ONTO SHELVES—AND PRICES HAVE STARTED TO DROP

Moscow exchange: "People can't get enough rubles."

Another reason for the firming ruble is the get-tough Central Bank of Russia. Authorities have squeezed the money supply 30% and are soaking up rubles with weekly sales of up to \$3 million in hard currency. Over the next two months, the Moscow Interbank Currency Exchange will increase such sales to a total of \$100 million. That could strengthen the ruble rate to 50 to the dollar. "We had doubts in December, but now we are sure we can save the ruble," says Alexei Ulukayev, a Yeltsin adviser.

At the same time, goods are showing up in stores and markets around Russia. Take Store No. 2, at a busy intersection near Moscow University. Here, fresh French-style bread, sour cream, cheese, beer, and sausages are for sale—a giant improvement from last December, before the price reform took effect. "Suppliers come to me now, they don't just ring me on the phone," says store manager Valentin A. Kucherov. Shunning

state agency wholesalers, he buys directly from Georgia and Armenia for fish from towns near the Black Sea.

Such diversity of sourcing is even lowering prices and shortening lines. Eggs, for example, have dropped from 20 to 15 rubles at Store No. 2. And flour, which zoomed from 46 kopeks to 10 rubles, has now slipped back to 5 rubles a kilo. But a few blocks away, where the manager of Store No. 64 still buys from the state wholesaler, prices are about 10% higher.

Price competition could be greatly expanded if Yeltsin delivers on his plan to sell off state-owned stores and distribution outlets. But despite a year of talk, very few stores in Moscow have been privatized. One reason is that local governments overrun with yesterday's bureaucrats still oversee sell-offs. "You look out a pack of documents and then they ask for more," says Anatoli Tatarintsev, director of a Moscow store.

Russia could learn from Yaroslavl's historic city of 660,000 some 250 miles

th of Moscow. For years, it was poor-supplied with food, since Moscow sinned off supplies. But now its stocks, m sausage to sugar, have picked up nificantly thanks to the barter deals h Ukraine and other regions.

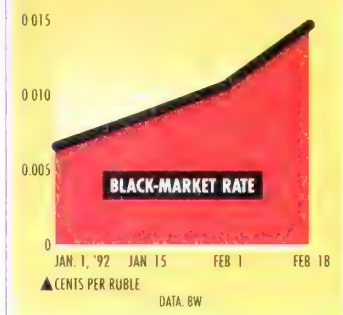
VISION RELIEF. Since prices were freed, competition has broken out between te stores and private farmers' mar-s. "We had meat at 90 rubles a kilo at state stores while it was 75 rubles at market," says vice-mayor Lyudmila Sorotova. Since then, Yaroslavl store nagers have learned they must cut es to get customers to buy. To spur m to be competitive, the city govern-t has banned state-owned wholesale lets, forcing stores to find cheaper rces of supply.

Still, cities such as Yaroslavl are bat-

ting some perverse side effects of the price reforms. High prices are driving away restaurant customers, threatening thousands of jobs. Across Russia, lost employment and big production drops may yet undo the Yeltsin reforms. Already, he has made limited concessions such as cutting some taxes and beefing up pensions to appease critics.

But in general, Yeltsin is staying the tough course. He is desperate to prove to his own people and the West that he is committed to market reforms and has the will to control both spending and the

THE RUBLE'S REBOUND



money presses. Indeed, Yeltsin has little choice if he hopes to get the West to back a \$6 billion fund to stabilize the ruble.

With such help, Yeltsin and his advisers believe the ruble could be made convertible as early as this summer, opening the door for foreign investment.

That, they say, could push their reforms over the top. Until then, all Russians can do is hope they're seeing the start of a recovery.

By Rose Brady in Moscow, with Deborah Stead in Yaroslavl and Igor Reichlin in St. Petersburg

WHERE CUTTHROAT COMPETITION MEANS EXACTLY THAT

The magic of market pricing hasn't yet reached Vasileostrovsky Farmers' Market in St. Petersburg, where prices for king-size cucumbers and juicy pears aren't set by supply and demand. Instead, pricing is dictated by hard-nosed traders from Azerbaijan, a craggy southern republic of the former Soviet Union.

Dipping bread into chipped mugs full of sour yogurt, the Azeri traders, most about 30, are quick to abandon their meal when customers approach. But many are just looking. Prices are shockingly high—120 rubles, about 2% of the average monthly salary, just for a kilogram of tomatoes.

EXOTIC SPOTS. Nor can the prices be talked down much. They rarely vary from stall to stall—or even from market to market inside the city. "The Azeri rule like kings at the market," says a state food-trade official in St. Petersburg. "They tell everyone what to do, and I don't know anyone who has tried to cross them."

For years, traders from exotic spots such as Azerbaijan or Uzbekistan have hawked top-quality, though expensive, produce, meats, and spices at similar markets in big Russian cities such as St. Petersburg. They had little competition because state-owned food stores were mostly empty. But on Jan. 2, Boris Yeltsin freed most prices. State stores started to fill up as prices rose.

Traders in other countries might be emptied to cut their prices to make them competitive with the state ones. Not the Azeris, who can go to extremes to maintain their already fat margins. They are organized like U.S. mobsters. Some sell; others make potential competitors offers they had bet-



PRICE-FIXING WITH A VENGEANCE

ter not refuse. That poses a huge problem for Russia as it lurches to a market economy.

To keep out competitors, such as Uzbeks, the Azeri enforcers first offer to buy their inventory even before they start unloading it. Uzbeks are a major threat: They can charge less because of low farming costs. Should competitors refuse to sell, they are warned by the Azeris to sell at going prices, or else. Punishment, sometimes death, can come swiftly to the stubborn.

Sources say retribution is often carried out at ramshackle hotels that cater to produce traders.

The situation isn't limited to St. Petersburg. Observers say many fruit stalls in Moscow markets are also controlled by the Azeri Mafia. Trading is expanding from sweet apples and pomegranates to weapons and drugs.

A CRACKDOWN FAILS. The Azeri stranglehold on farmers' markets could be cracked if enough competitors operated in cities such as St. Petersburg. But political turmoil in the wake of the Soviet breakup has prevented that. "We should be getting winter apples from Georgia, fruit from Ukraine and Moldova, and lots of cheeses and meat from the Baltics," says Vladimir Khurtsilava, general manager of the Vasileostrovsky market. "None of that is coming this year."

As food supplies get tighter, especially during the winter, law enforcement authorities are loath to push the Azeris too hard. A decade ago, city authorities attempted a sweep of the market Mafia. But it didn't work, and now the markets are the only reliable source of fresh fruits and vegetables in the winter. Market director Khurtsilava explains that the Azeris have put a lot of money into greenhouses and transport. "They are just protecting their investment," he says.

The final blow to the market Mafia will come when stores are privatized and new owners look for independent sources of supply. But selling off stores has been laboriously slow. And until then, the Azeris at Vasileostrovsky Market will operate as they please.

By Igor Reichlin in St. Petersburg

EUROPE

EUROPE GETS IN SHAPE BY PUSHING OUT PINK SLIPS

Bad times and the looming single market prompt huge new layoffs

The chairmen of Germany's Big Three auto makers didn't pull any punches in a Bonn meeting on Feb. 12 with Chancellor Helmut Kohl. Car sales in their huge home market, they told him, may plunge 15% this year. At the same time, they're under the gun to improve productivity as Europe opens to Japanese imports. That adds up to one thing, the executives told Kohl: job cuts on a scale Germany has rarely seen. BMW will lop off 3,000 workers, while Daimler Benz may dump 20,000, industry sources say. And Volkswagen will follow in a year or two, cutting 10,000 or more.

Across Europe, companies are facing a new round of painful restructuring. They are stepping up the cutbacks that started when European economies softened more than a year ago. Now, the pressures to streamline are even stronger. Punishing German interest rates and weak exports to the U.S. have prolonged Europe's economic slump. Corporate profits are in a slide. And going into the home stretch to the single market, competition from Japan and even Eastern Europe is building. That means the jobless rolls will continue to rise even if most European economies manage to turn upward in coming months (charts).

RIPPLE EFFECT. A unified Europe was supposed to create jobs, not destroy them. Over the long pull, it probably will. But Europe is discovering there's a near-term price to pay. "We think all the restructuring is going to slow growth for a couple of years," says Jeff M. Fettig, a vice-president of Whirlpool Corp.'s European arm. Workers who lose their jobs, Fettig notes, won't buy washers and refrigerators.

Most troubling are the cutbacks in Europe's powerhouse economy, Germany. Largely immune until now from Europe's restructuring wave, German auto makers plus such blue-chip giants as chemical producer BASF and steelmaker

Hoesch are suddenly chopping jobs with a vengeance. With the post-unification consumer spree fading, so is optimism for a second-half pickup in the German economy, which has declined for three quarters.

That's bad news for Germany's trading partners. German demand has been the main safety net keeping the rest of Europe from following Britain into recession. The Bundesbank doesn't even seem disposed to offer lower interest

British market. So Ford recently nounced 2,100 new layoffs in Britain.

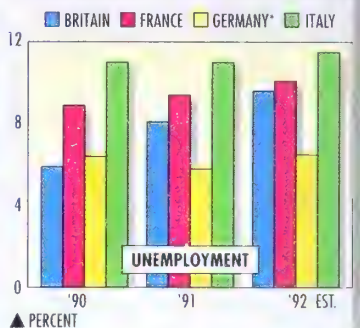
Now, another region poses a threat to EC workers as well: Eastern Europe. eager to form political ties with former East bloc countries and to boost their economies, thus heading off a tidal wave of immigrants, the EC is lowering barriers to Eastern goods. Steel, for example. In March, EC quotas on Eastern European imports will start falling. Facing a flood of cheap steel, EC producers are rushing to boost efficiency. Europe's biggest steelmaker, France's Grot Usinor Sacilor, has announced plant closings and investments in new technology that will idle 8,000 employees. "Eastern Europe is a serious menace," says Usinor executive.

The same is true in machine tools. Germany's No. 2 industry after auto. Already fighting Japanese and Soviet

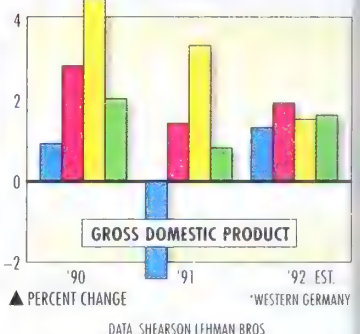


FOUNDING THE PAVEMENT IN FRANCE

WORKERS PAY THE PRICE



...FOR SLOW GROWTH IN EUROPE



rates—something Germany's partners have long clamored for. German inflation, still a shade above 4%, won't permit that soon, Bundesbank officials indicate.

For many European companies, the ultimate reason to cut jobs is Japanese competition. High-wage Germany is going through a wrenching debate on its world competitiveness. Similar soul-searching is under way in other countries. Ford of Europe Inc., for example, says its British plants are 33% less productive than its Continental plants, which could just as easily supply the

Korean imports that undersell them 20% to 30%, German manufacturers now fear a flood of cut-rate basic machine tools from Czechoslovakia and Poland.

RESTLESS UNIONS. The restructuring binge is hitting white-collar workers harder than in the past. They're the main victims of 2,350 job cuts announced in February by British Aerospace Plc., which lost \$274 million last year. Europe's young workers are also suffering. Unemployment among Italians and French under age 25 is about 25%.

With so many jobs disappearing, I-



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rope's unions are demanding government action. "We want spending on infrastructure—housing, schools," says Jacques Bass, economist of a big French union, the Confédération Française Démocratique du Travail. In Italy—Europe's unemployment leader—labor pressure has won government jobs for 1,000 employees being laid off by Olivetti, plus \$3.75 billion in promised state orders for the money-losing company.

But most governments are hanging back. They fear inflation, and they also sympathize with industry efforts to boost efficiency. The risk is that out-of-

work voters may rush toward extremist parties—such as France's National Front. Others may question whether a united Europe is such a great idea after all. That could complicate approval needed by every EC country of the new Maastricht union treaty, with its stiff rules on inflation, debt, and deficits. Politicians such as Kohl face a tough selling job in the months ahead, persuading displaced workers to withhold judgment on the new Europe for a while longer.

By Stewart Toy in Paris, with John Templeman in Bonn, Richard A. Melcher in London, and John Rossant in Rome

CANADA

GUNFIGHT AT THE CUSTOMS CORRAL

A recent trade ruling by Washington has Ottawa fighting mad

A dispute over Honda Motor Co.'s cross-border shuttling of cars and auto parts is threatening to erupt into a bitter showdown between Washington and Ottawa. The U.S. Customs Service ruled on Feb. 12 that Honda must pay duties on cars it ships to the U.S. from Canada. Customs says Civics built by Honda in 1989-90 in Alliston, Ont., with engines from its Anna (Ohio) plant and Japan, failed to meet the 50% North American content requirement of the U.S.-Canada Free Trade Agreement.

That ruling could have far-reaching implications for free trade in North America. "We are getting sideswiped by American Japan-bashing," says Prime Minister Brian Mulroney, who vows to get the ruling overturned. But Mulroney is likely to collide with Washington's determination to set tough local-content standards both for the U.S.-Canada pact and for the proposed North American Free Trade Agreement (NAFTA), which includes Mexico as well as Canada. NAFTA talks resumed in Dallas on Feb. 17.

So far, Canadian concerns are being dismissed almost contemptuously by Washington. "Nobody at the White House has given three minutes of thought" to strains the decision is causing in U.S.-Canada relations, says a U.S. trade official.

'BACKLASH.' Canadians fear that Customs' tough interpretation of the local-content rule will crimp Canadian exports to the U.S. and frighten away future investment in Canada. Customs levied \$19 million

in back duties on Civics imported in 1989-90. If its finding that the cars fail to meet the content rule isn't overturned, Honda will have to pay a 2½% duty, or about \$180 apiece, on the 80,000 Civics it ships to the U.S. annually. Honda Canada warns that if that happens, it "will have a major impact on Honda's future investment decisions."

Washington officials say their target is the Japanese, not the Canadians. They argue that Honda's main aim in Canada is to entrench itself in the North Ameri-

can market by enlisting Ottawa's support. "Honda is in Canada for political reasons, not economic reasons," says a U.S. official. "Otherwise, they would have put the plant in the U.S."

Seen from north of the border, however, U.S. trade actions look like a series of moves against Canadian exports. The Commerce Dept. launched a countervailing duty case against Canadian lumber last fall, even though Canada's share of the U.S. market is dropping. And a preliminary Commerce ruling could require Norsk Hydro Canada to pay duties and dumping charges of up to 66% on exports of magnesium to the U.S. from its \$500 million Quebec plant. The result could be a "backlash" in Canada, warns Thomas P. d'Aquino, head of the Business Council on National Issues, Canada's leading business organization.

In the NAFTA talks, the U.S. is pushing to boost the North American content requirement above 50%. If that happens, Canada is likely to reject the agreement, thus reducing it to a U.S.-Mexican trade deal. More serious is the likelihood that ongoing tensions will wipe out the already slim reelection chances next year for Mulroney, a free trader who values close ties with the U.S.

MEMO TO BUSH. That could drastically change the mood of the U.S.-Canadian trade relationship. On Feb. 14, Liberal Party Leader Jean Chrétien, Mulroney's chief opponent, told President Bush that it's time to renegotiate the U.S.-Canada pact. With most Canadians now against the pact, there is growing pressure to abrogate it if such talks fail.

Resentment is even rising in Quebec, which strongly backed Mulroney's free-trade agenda in the 1990 elections. Quebecers see the Norsk Hydro ruling as an ominous portent. The U.S. claims Norsk's magnesium exports are subsidized with cheap power from Hydro Quebec, the utility that is the cornerstone of Quebec's industrial strategy. In spite of the free-trade pact, says Jolanda Ciaccia, Quebec's International Affairs Minister, the U.S. is treating Canada "just like the Japanese."

Canada will try to challenge the U.S. actions in dispute-settlement panels under the trade pact. Ottawa won in the system's first major test over Canadian pork exports, last year. But with the U.S. playing hardball on trade, many Canadians fear that the odds of success have fallen. If Canada loses, pressure to reopen or repudiate the trade pact could become unstoppable.

By William C. Symonds in Toronto with Paul Magnusson in Washington and John Pearson in New York



HONDA'S ONTARIO PLANT: A \$180 DUTY ON CIVICS?

A blurry, warm-toned photograph of a child's room. In the center, a small wooden table sits on a dark wooden stool. A teddy bear is on the table, and a green chair is tucked under it. To the left, a large wooden rocking chair is visible. The background is a soft-focus wall with a lamp. The overall mood is cozy and nostalgic.

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hard for your money as you do.





THE OTHER BIG LOSER IN NEW HAMPSHIRE

search didn't deliver enough for the candidates who relied on it

Ask market researchers about the success of Paul E. Tsongas and Patrick J. Buchanan in New Hampshire, and these believers in the power of polling would be hard-pressed to come up with an explanation. After

Tsongas bested his Democratic rivals, and Buchanan a strong second to President Bush—even though both candidates relied very heavily on research.

Tsongas kicked off the first week of the primary with a television commercial explaining why he opposes a tax cut for the middle class. At the former Massachusetts senator's own polls and focus groups show that most middle-class voters favor a tax break. "He's the epitome of a research-driven candidate," says Michael Shea, a media consultant to the Tsongas campaign.

Buchanan, meanwhile, ran a commercial that rapped Bush for not pressing Congress harder to pass the Senate House's proposed 10 percent increase in the income tax exemption for children.

Rich Beltway research maven put him to this issue? His sister and campaign adviser, Angela, who saw it in a *Washington Post* article. As for Frank I. Luntz, the 29-year-old college professor who takes polls for Buchanan, he defied the renegade conservative for only 15 minutes a day in the final week.

AVY INVESTMENT. This disregard for research is in stunning contrast to the reverence shown by other top candidates. The Bush campaign is run by a trained researcher, Robert M. Teeter, who draws on the deep resources of the Republican Party. The GOP conducted three large-scale focus groups on the evening of the President's State of the Union speech to test reac-

tion to his message. And Gov. Bill Clinton actually observed several of the daily voter focus groups his campaign sponsored across New Hampshire.

The dramatic results in that state underline an unforeseen truth about

cal consulting. Research works best in politics when the race is close and issues are muddier, argues Sabato. This year, voters' fixation on the economy has led them to demand concrete proposals and made them less tolerant of image-driven campaigns. Nor does research protect against outside calamities, such as the rumors dogging Clinton.

That's bad news for both parties, which have invested heavily to plumb the psyches of voters. But it's a particularly cruel twist for the Democrats: The party has made it a top priority to close what it sees as a long-standing research gap with the Republicans. "We need new tools," says Paul Tully, political director of the Democratic National Committee.

As recently as the 1984 Mondale campaign, he says, Democrats believed that market research efforts took second place to stitching together different interest groups, such as labor and Southern voters. In 1992, the DNC will spend several hundred thousand dollars on research for the Presidential race alone.

DIAL FOR PAIN. The Democrats have a way to go to close the research gap. The GOP is historically better funded, and its long-time connection to Madison Avenue has given the party access to some of the ad industry's savviest market researchers. Republican research helped produce Reagan's "Morning in America" ads in 1984. Exceptionally broad surveys by GOP pollster Richard B. Wirthlin revealed that Americans were feeling better about themselves than they had in decades. "We wouldn't have had the same confidence" about the spots' dewy-eyed emotionalism without the research, says Philip B. Dusenberry, vice-chairman of BBDO Worldwide Inc. and a member of Reagan's advertising team.

Now, the Democrats are nurturing their own Wirthlins. The DNC hired pollster Mark Mellman to stage a large focus group on Jan. 28 to gauge reaction to President Bush's State of the Union Address. The members were each given a handheld instrument, which they dialed up or down to reflect their response to what the President was saying. Tully says the results suggest



the 1992 election: The sophisticated market research that helped propel Reagan in 1984 and Bush in 1988 won't be enough to win the White House this time around. "What makes 1992 different is that the economy is an overriding issue," says Larry J. Sabato, a professor of government at the University of Virginia and the author of a book on politi-

CAMPAIGN 1992'S TOP RESEARCH MINDS

GEORGE BUSH/Fred Steeper Longtime associate of Robert M. Teeter, GOP researcher and now Bush's campaign manager

PATRICK BUCHANAN/Frank Luntz 29-year-old professor of American civilization; holds a doctorate in political science

PAUL TSONGAS/Tubby Harrison Prominent pollster in Massachusetts politics; was poll taker for Michael Dukakis in 1988

BILL CLINTON/Stanley Greenberg Key Democratic strategist; taught at Yale; published a book on quantitative data gathering

DATA BW

that voters feel the President doesn't really understand the economic pain many Americans are experiencing.

Another research pioneer for the Democrats is Stanley Greenberg, a strategist who made exhaustive use of focus groups for a seminal 1985 study on why working-class voters in Michigan were abandoning the Democratic Party for Reagan. Greenberg signed on early with Clinton, who took the need for research more to heart than any other Democratic contender. Based on voter surveys he did in New Hampshire before Christmas, Greenberg advised Clinton to concentrate on the economy in his advertising. One commercial showed Clinton discussing his proposals and featured a toll-free number viewers could call for details. After this spot started airing in early January, Clinton surged from 20% to 33% in the polls.

NO-IMAGE ALLURE. Then Clinton ran into trouble over allegations about extramarital affairs and his draft deferment. Greenberg's research machine went into overdrive: After conducting daily focus groups across the state, Clinton's media advisers produced a 60-second biographical spot emphasizing his hardscrabble roots and self-made success.

But the tide of damaging publicity ultimately was too strong to turn back. "He could have the finest research microscope in the world," says Alex Castellanos, a media adviser to the Bush campaign, "but he had an elephant charging at him." Voters were also charmed by Tsongas' unrehearsed manner and focus on the issues: "Tsongas would have been a footnote in 1988," says Sabato. "But his lack of image actually reinforces his substance."

The same is true of Buchanan, who has spent only 3% of his campaign budget on market research, less than the 5% to 7% that is customary for a Presidential bid. Because the campaign didn't have the money to conduct focus groups, Luntz had 13 students from his class at the University of Pennsylvania travel with him in New Hampshire, and they served as a "floating focus group." Primitive, yes. But frustrated voters responded to Buchanan's blunt criticism of Bush's economic policies.

Now, as attention shifts to the big Southern primaries, Tsongas and Buchanan will have to translate their seat-of-the-pants success to a larger and more complicated political landscape. And they must assume that the economy will revive at least somewhat by the time of the general election. It's one thing to run on your gut in a state with barely 1 million people and a tiny media market. But Tsongas and Buchanan will need more than their instincts for the long march through Dixie.

By Mark Landler in New York

The Corporation

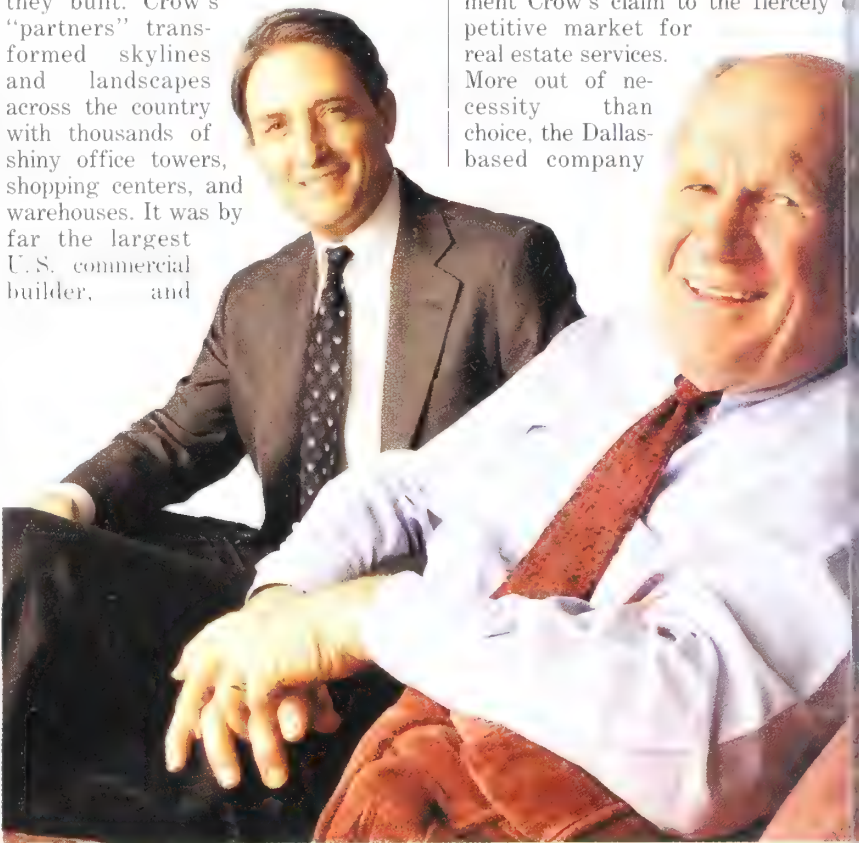
STRATEGIES

GUESS WHAT TRAMMELL CROW IS EATING

The humbled developer is resorting to pushing services

In real estate's boom years, Trammell Crow Co. was one of the most ferocious competitors around. The legendary builder staffed itself with hungry young MBAs from the top schools, paying them meager salaries but giving them equity in the projects they built. Crow's "partners" transformed skylines and landscapes across the country with thousands of shiny office towers, shopping centers, and warehouses. It was by far the largest U.S. commercial builder, and

down from \$2.2 billion in 1985 (cl... This year won't be much better, pre... Williams, who joined the compan... 1973. Adds founder Trammell C... "This downturn is all-pervading, an... promises to be a long time in curing... These days, the CEO is trying to... ment Crow's claim to the fiercely c... petitive market for... real estate services. More out of necessity than choice, the Dallas-based company



Once builders of skylines, CEO Williams and Trammell Crow now face a nasty legal battle with a former partner

proud of it. Yet the mood at Trammell Crow is vastly different these days. Ask CEO J. McDonald (Don) Williams which U.S. company was No. 1 in commercial development last year, and he shrugs: "I don't even care."

The answer is still Trammell Crow. But that's not much to brag about now that the industry is a shadow of its former self. Crow started about \$100 million worth of new construction last year,

now wants to establish itself as a stop shop for property management, leasing, construction management, information services, and yes, even a little development.

But the transformation of the once freewheeling Crow has been wrenching with fierce internal debates and nasty lawsuits among top-ranking partners who once considered themselves brethren. More than half of the 170 partners

lived in Crow's commercial proper-
four years ago have left the compa-
Many simply couldn't or wouldn't
ce the transition from go-go develop-
it to slow and steady management.
u're taking a bunch of fighter pilots
telling them that now they have to
ntain the aircraft carrier," explains
estate consultant Christopher B.
berger, who worked with Crow on
year's far-reaching reorganization.
row had little choice but to try some-
g new. When the overheated real es-
market collapsed, Crow's growth
nula became a recipe for disaster.
e partners could hit it rich only by
eloping, they had little incentive to
v down. Crow soon found itself with
few of troubled properties whose
tal income failed to cover the debt
rice. Rocked by unfounded bankrupt-
rumors in 1990 and pressed by edgy
iers, Crow slammed on the brakes.
he old Crow was not a typical compa-
but a complex web of 1,500 partner-
s, joint ventures, and corporations.
ividual partnerships were formed for
ually every one of the parent compa-
s projects. But after workouts with
re than 150 lenders and a consolida-
i of equity ownership among Crow
tners, the players have changed. The
tnerships are no longer active build-
g, but they still hold stakes in some
0 projects, valued at about \$9 billion.
it's down from \$11.2 billion in 1989
ause of property sales, falling values,
l foreclosures.

INTERNAL AFFAIRS. The makeover creat-
a separate entity to focus on service
businesses, including management of
ow properties. This "new" Crow,
ned mostly by 77-year-old
ummell Crow, his family, and
Williams, now offers em-
ees market-rate salaries,
uses, and profit-sharing.
e company also has eliminat-
9 of its 15 regional offices
l wiped out a layer of middle
management. Total employ-
ent is down almost 24% since
89, to 2,650. The Crow family
n't gone unscathed in the
structuring. Harlan R. Crow,
on of the founder and man-
ner of the family interests,
ures the Crows' net worth
s plunged some 50% from its
ak of more than \$1 billion.

The remaking of Crow has been ran-
orous. The company is tight-lipped
out its feuds, but one major dispute is
arkly displayed in recent lawsuits filed
federal and state courts in Dallas. The
ht stems partly from a system in
ich partners borrowed from or lent to
e another to cover cash requirements
their projects and operations. When
al estate slumped, it was clear that

many partners would never be able to
repay their internal loans. So Crow cre-
ated a "roll-up" program to dig them out
of their deep holes: In exchange for a
partner's equity in his projects, Crow
forgave the internal debt. When the eq-
uity was worth less than the debt, the
few solvent partners, including the
Crows and Williams, absorbed the differ-
ence as a loss.

BOGUS LOSSES? More than 100 partners
agreed to roll-ups, with many of them
leaving Crow. But the program wasn't a
hit with everyone. Last September, the
company sued former Managing Partner
Joel C. Peterson for refusing to absorb

were trading in was vastly undervalued.
One reason few partners resisted was
that the company promised the debt for-
giveness would not be taxable, he adds.
If it is taxable, as Peterson contends,
many former partners could be hit with
huge tax bills. Williams declines to com-
ment on the charges, except to deny them.

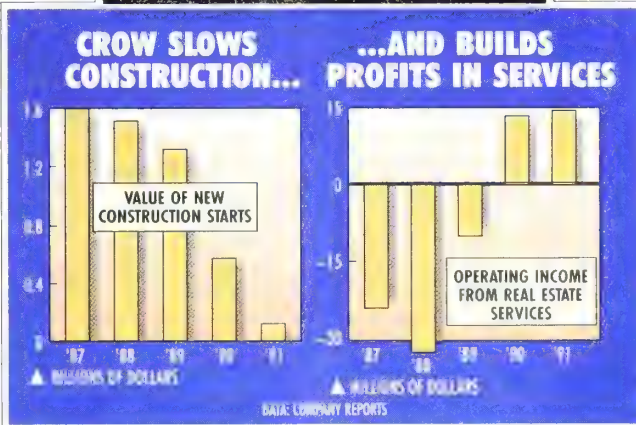
The courts won't be Crow's only bat-
tleground. As it pushes into real estate
services, the company faces a slew of
competition, not only from regional prop-
erty managers and brokerage companies
but from financial institutions and other
developers as well. "There's a lot more
volatility than there used to be," with
management contracts often canceled on
60 to 90 days' notice, says real estate
economist Richard Kateley. Crow will
also need to be careful when its proper-
ties are vying for tenants against build-
ings owned by its clients. "That's an in-
tolerable conflict of interest," says John
L. Dowling, executive vice-president at
rival Cushman & Wakefield Inc.

The competition will almost certainly
make profits harder to come by. Crow's
services business had operating income
of \$14.4 million last year on revenues of
\$158 million. Now, many outsiders ques-
tion whether Crow can achieve the 10%
to 15% operating margins it's aiming for.
With increasing competition, "margins
are low and getting lower" in real estate
services, says Kateley.

'SEAMLESS QUALITY.' But Crow has some
potentially formidable advantages, in-
cluding a well-known name, a major
presence in 45 markets, and long experi-
ence managing its own properties. Crow
hopes to gain another edge by dealing
with fewer suppliers to get bigger
discounts. That could lower
a building owner's total operat-
ing costs by 6% to 9%, esti-
mates Mark Gottfredson of
Bain & Co., a consultant work-
ing with Crow on improving its
services business.

The Peterson suit, of course,
has been a major distraction.
People on both sides agree that
some sort of settlement is like-
ly. But in the meantime, Crow
is trying to focus on the nitty-
gritty of the services business.
A top priority for Williams is
ensuring what he calls "seam-
less quality" across all Crow offices. A
committee of top Crow executives is try-
ing to establish standards in every facet
of the company's operations—from han-
dling maintenance requests to dealing
with tenants who are late paying the
rent. That's hardly the stuff that a de-
veloper's dreams are made of. But it
may be Crow's best chance for building
a company with any enduring value.

By Wendy Zellner in Dallas



his share of the debts from insolvent
partners. The 18-year Crow veteran shot
back with his own lawsuits.

Peterson accuses the Crows and Wil-
liams of using the roll-ups to grab con-
trol of the assets and the operating com-
pany for only pennies on the dollar. In
the process, he says, they allocated to
him more than \$34 million in bogus
losses. The losses were inflated, he
claims, because the equity the partners

BIOTECH: AMERICA'S DREAM MACHINE

WILL IT BECOME THE DOMINANT GROWTH INDUSTRY OF THE 1990s?

Los Angeles stockbroker Richard Bock had one heck of a 1991. The 58-year-old biotech stock specialist for Sutro & Co. racked up 200% to 300% gains for most of his clients and made "more money than I've made in my life." Now, Bock is looking at million-dollar homes. His clients say he earned his fortune: Several call him a "walking encyclopedia of the field." But lately, when he's knee-deep in literature from some 250 public biotech companies, he wonders why he bothers. "It doesn't pay to be too smart," he says, "when 95% of the investors have no idea what they're doing."

Last year, anyone could have made out in biotech: If in January you had invested in one of six companies with "immune" in its name—Immunex, ImmuLogic, ImmunoGen, Immunomedics, Med-Immune, or Immune Response—you'd have had a 60% to 1,200% gain by December. Biotech stocks as a group soared 100%-plus,

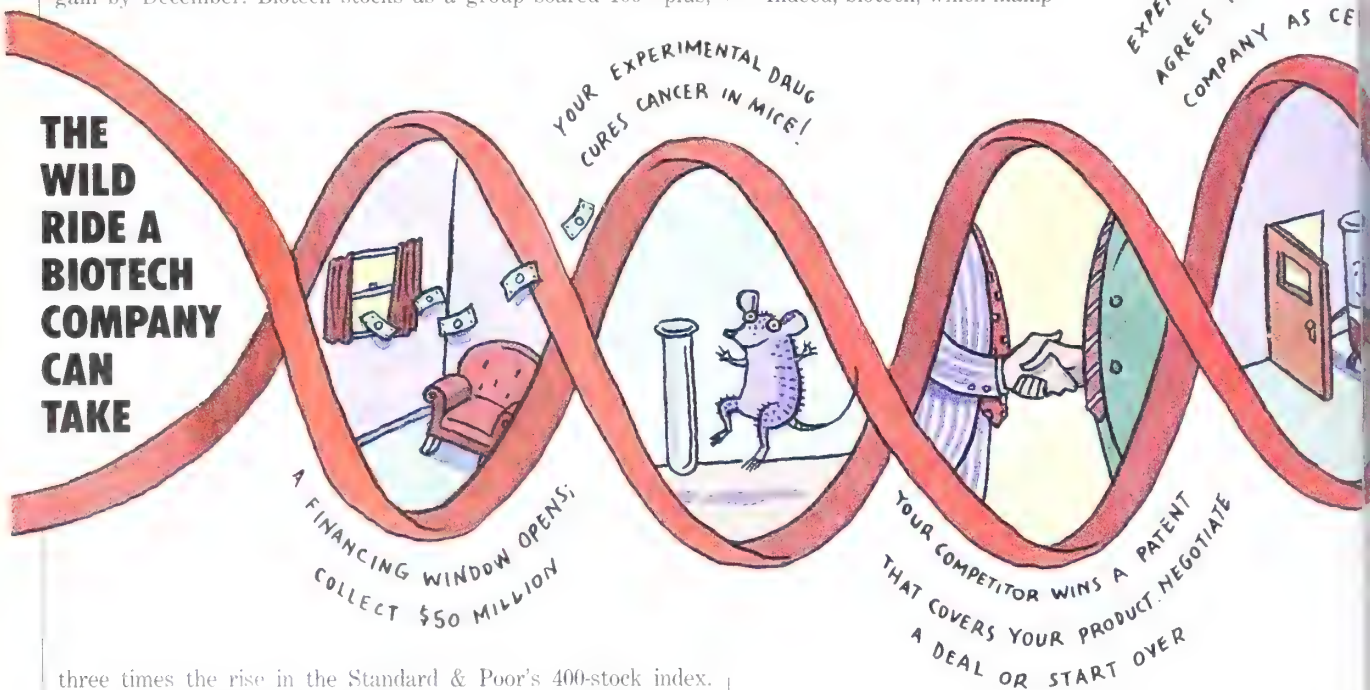
the FDA raised questions about Centoxin, its drug that fights blood infections called sepsis.

But the speculation over when the market frenzy will overshadow an inescapable truth: The supercharged stock run isn't just for investors. It's a coming-out for the industry. More than 50 biotech babies have gone public since 1991, with another 50 public companies raised new equity. The tally, which rises daily as companies file for more public offerings, had \$4.5 billion by late January, more than the industry raised in the previous decade and enough to fund mountains of new research. Just 15 years after the industry was created, "it's as if biotech is being reborn," says Gordon M. Binder, Amgen's chief executive.

Indeed, biotech, which manip-

EXPERIENCED DRUG EXECUTIVE
AGREES TO JOIN YOUR
COMPANY AS CEO

THE
WILD
RIDE A
BIOTECH
COMPANY
CAN
TAKE



three times the rise in the Standard & Poor's 400-stock index.

This is surely a passing phenomenon, set off in part by the flight from sagging real estate values, busted banks, and low-yielding bonds. Should industry leader Amgen Inc. stumble, says Phillip J. Whitcome, CEO of Neurogen Corp., "it would not only be Armageddon for Amgen but for everybody." Already, 1991 high-fliers Immune Response, MGI Pharma, Chiron, Synergen, and Centocor have slid well off their highs. U.S. Bioscience Inc., based in West Conshohocken, Pa., lost half its \$1.2 billion market value one day in February after a Food & Drug Administration committee sought more data on the company's cancer drug, Ethyol. On Feb. 19, Centocor's stock quickly dropped 9 points after

ulates the very processes of life, has emerged as the driving force in medical technology. Biotech companies are developing new drugs that will target traditional diseases more precisely than conventional drugs do. Some of these will treat, and perhaps even conquer, incurable or inherited disorders such as AIDS, multiple sclerosis, and Alzheimer's. Old-line drugmakers have gotten the message. It's getting much harder to come up with effective new varieties of the chemical-based drugs in which they specialize. The Mercks, Roches, and Sandozes of the world are recharging their product portfolios by buying stakes in biotech companies.

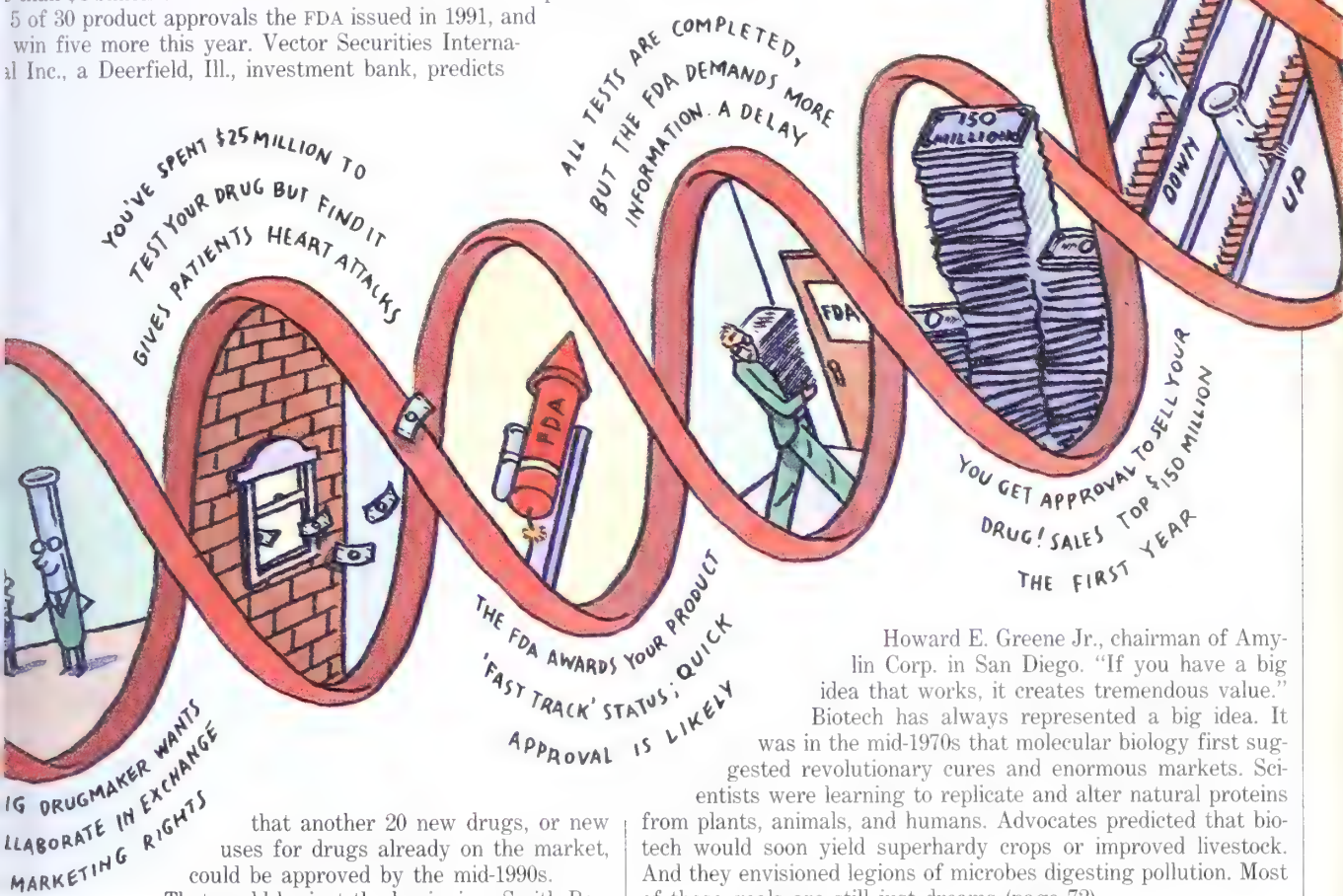
inking joint ventures. They're getting some pointers in the too, where a marriage of biotech with chemical synthesis may lead to innovative "superdrugs" that will be discovered out the lengthy, trial-and-error approach used to find conventional treatments.

ing such potential, even the laissez-faire Bush Administration wants to bolster one of the few U.S. high-tech industries still holds a commanding world lead. On Jan. 31, the Administration unveiled its "Biotechnology Initiative," a plan to increase federal support for basic biotech research by 7%, to \$4.03 billion annually. In making that announcement, D. Allan Bromley, the president's science adviser, observed that since World War II, technologies derived from physics, chemistry, and the physical sciences have dominated world economies. But in the future, he predicted, that role may go to biotech.

THE STRETCH. Unquestionably, the industry is building momentum. Pioneers Genentech, Amgen, Chiron, Biogen, and Centocor are either in the black or on the home stretch toward getting there. Biotech-related drugs, vaccines, and tests now rack up more than \$4 billion in annual sales worldwide. Biotech companies received 5 of 30 product approvals the FDA issued in 1991, and expect to win five more this year. Vector Securities International Inc., a Deerfield, Ill., investment bank, predicts

preventing heart attacks, would grow beyond \$200 million a year, 80% shy of what optimists had once predicted. Genentech's stock plunged, taking the industry with it. In early 1990, Genentech executives, in part citing an inability to fund all the promising research in their labs, sold 60% of the company to Roche Holding Ltd. for \$2.1 billion.

But when Genentech faltered, Amgen took over. On the strength of EPO, its anti-anemia drug, and G-CSF, its cancer-fighting agent, the revenues of the Thousand Oaks (Calif.) company more than doubled last year to \$699 million. Its profits soared 2,400%, to \$98 million. The Street has rewarded that growth with a \$10 billion market valuation. And on Jan. 1, Amgen joined the Standard & Poor's 500. "Amgen shows that biotech isn't a pipe dream," says



BIG DRUGMAKER WANTS TO COLLABORATE IN EXCHANGE FOR MARKETING RIGHTS

that another 20 new drugs, or new uses for drugs already on the market, could be approved by the mid-1990s.

That could be just the beginning. Smith Barney, Harris Upham & Co. biotechnology analyst M. Gilbert figures that publicly held biotech companies have 100 drugs in human trials and more than 400 products in the stage of development. The potential, adds Gilbert, "is staggering." By the year 2000, according to several forecasts, \$50 billion worth of biotech products should be on sale around the globe. "We've gone from 10 years of mostly dream and mythology to reality," says A. Grant Heidrichs III, a Palo Alto (Calif.) venture capitalist with the Mayfield Fund.

That's quite a turnaround from just two years ago. Then, says Mike Byers of Kleiner Perkins Caufield & Byers, a San Francisco venture capital firm, "we were wondering how we were going to fund this industry." Wall Street was fed up with biotech. Genentech Inc., the industry's standard-bearer in the 1980s, had floundered. By 1989, it seemed unlikely that sales of TPA, its drug for

Howard E. Greene Jr., chairman of Amylin Corp. in San Diego. "If you have a big idea that works, it creates tremendous value." Biotech has always represented a big idea. It was in the mid-1970s that molecular biology first suggested revolutionary cures and enormous markets. Scientists were learning to replicate and alter natural proteins from plants, animals, and humans. Advocates predicted that biotech would soon yield superhardy crops or improved livestock. And they envisioned legions of microbes digesting pollution. Most of those goals are still just dreams (page 72).

But in medical biotech, the miracles have begun. They can be traced to 1976, when venture capitalist Robert A. Swanson and University of California at San Francisco scientist Herbert W. Boyer sketched out a business plan for Genentech in a San Francisco tavern. By the early 1980s, Genentech and contemporaries such as Biogen and Cetus had become expert at coaxing large quantities of valuable natural proteins, such as insulin or interferon, from cellular factories. The process was called gene splicing, or recombinant-DNA technology. It was the first fundamentally new drugmaking approach to come out in decades.

Traditionally, big drug companies had screened thousands of chemicals to find one that would cure disease. This costly, time-consuming process often created drugs with undesirable side effects. The gene-splicers believed that drugs derived from the body's own immune system and other natural methods for fight-

ing disease would provide more precise cures with fewer side effects. Companies such as Centocor Inc. and Hybritech Inc. used another technique to churn out monoclonal antibodies, the body's defenses against bacteria and viruses.

The early companies found valuable drugs this way—sometimes more valuable than first imagined. Alpha Interferon, for instance, was first approved to treat a rare cancer called hairy-cell leukemia. But it has since found an \$800 million worldwide market as a treatment for herpes and hepatitis, and it's being tested against AIDS. The market for other protein drugs, including insulin to treat diabetes, human growth hormone to treat growth deficiencies, and Genentech's clot-busting TPA, is well over \$2 billion. At least a dozen promising gene-spliced drugs are now being tested in patients, including a drug to speed wound healing from Celtrix Laboratories, an infection-fighting agent from Synergen, and an anticancer drug from ImClone.

By the mid-1980s, however, it was clear that protein drugs have weaknesses. They are expensive and hard to make. And they are large molecules that break down quickly in the body. So they must be injected to do their work. That's fine for life-threatening conditions. But most drug industry profits come from products that treat chronic ills such as hypertension or pain, where pills are the

easiest method of delivery. That's why biotech companies like superdrugs. In theory, these will be discovered and designed using advanced techniques of biology. But they'll be made by old-fashioned chemical synthesis and taken as pills. It may be the late 1990s before the first superdrugs reach market. But already, they're transforming biotech's culture. "Gene jockeys" once flatly rejected chemistry techniques for making drugs. Now, they are hiring chemists.

Almost in mirror image, conventional drugmakers have decided that biotech tools are too powerful to be left to startups. They began building internal biotechnology groups in the early 1980s. These haven't been hugely productive. But they ensure that nowadays, when investors bet on biotech, they aren't putting their money on some fringe idea. They're wagering on whether the Davids have the creativity, drive, and resources to better the Goliaths at the same game.

The *wunderkinder* are speeding off in many directions (table). And unlike their predecessors, some are targeting classes of disease instead of specific technologies. At least a dozen companies, including Alkermes, Athena Neurosciences, Neurogen, and Regeneron, are focusing on disorders of the central nervous system—from Alzheimer's to Parkinson's and Lou Gehrig's disease. Companies such as Icos, Cytel, ImmuLogic,

and Anergen are after drugs that treat inflammatory and auto-immune disorders, such as rheumatoid arthritis. At least six others—including COR Therapeutics, Gensia, and Arris—want to cure cardiovascular disorders, while Curatrix Technologies is developing drugs to speed wound-healing.

There are numerous ways to attack any disease. So, some researchers say this broader approach helps identify the best potential treatments. "Ask me a program, and I'll tell you our target," says Vaughn M. Kailian, president of COR Therapeutics Inc. The South San Francisco company has raised \$51.5 million to exploit insights into cardiovascular disease. Its first product, now in tests, inhibits blood clots in patients who have suffered heart attacks.

ERRANT GENES. Still, some new technologies are so promising that it's crazy not to focus on them. Consider "antisense" technology, the central strategy of Genad Sciences, Isis, and Genta. Its aim is to sabotage disease-causing genes by interfering in chemicals, modeled after DNA that stop these genes from working. Another group, including startup Tularic Inc. in Menlo Park, Calif., and Oncogene Science Inc., wants to exploit transcription factors, or chemicals within cells that turn genes on and off. In theory, antisense and transcription technology could short-circuit cancer and disorders such as Huntington's disease and sickle cell anemia. Says Michael Riordon, president of Gilead: "If you focus on disease without a powerful technology, you must just make incremental advances."

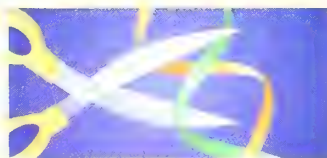
Another high-octane technology, developed by Vertex Pharmaceuticals Inc.

**WITH THE BIG DRUG
COMPANIES IN
PURSUIT, BIOTECH'S
WUNDERKINDER ARE
SPEEDING OFF IN NEW
DIRECTIONS**

A GUIDE TO WHO'S WHO AND WHAT'S WHAT

Genta, Gensia, Genzyme. Do these hot little biotech companies sound the same to you? Can't remember who's doing what in biotech research? Here's help:

RECOMBINANT DNA TECHNOLOGY



Gene-splicing lets companies make proteins that perform critical functions in the body. This can lead to drugs such as EPO, which stimulates red blood cells to grow. Increasingly, scientists use this technology to study diseases. Then they choose one of the technologies (right) to fight it

Companies pursuing protein drugs:

AMGEN, AMYLIN, BIOGEN, CAL BIO, CHIRON, GENENTECH, GENETICS INSTITUTE, GENSIA, GENZYME, IMCLONE, IMMUNEX, REGENERON, REPLIGEN, SYNERGEN, T CELL SCIENCES, XOMA

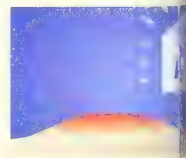
VACCINES



Biotech can turbocharge older vaccines. This approach is being tried to attack infectious maladies ranging from AIDS to Lyme disease

CHIRON, GENELABS, IMMUNE RESPONSE, MEDIMMUNE, REPLIGEN, NORTH AMERICAN VACCINE

CARBOHYDRATE CHEMISTRY



Sugar molecules in the body act as roadblocks for cells and chemicals that exacerbate inflammation. Some companies hope to block the migration of the damaging agents to treat such diseases as rheumatoid arthritis

ALPHA-BETA, BIOGEN, GENENTECH, GENZYME, GLYCOMED, ICOS

Agouron Pharmaceuticals Inc., marries technology and computer-aided drug design. These companies use biotech to dissect the structure of proteins in the body called receptors. Receptors, which sit on the surfaces of cells, act as gatekeepers that let certain agents enter and influence cells—kill or infect them, or change their behavior. Genetically altered drugs, not chemical ones, work by linking up, or binding, with these receptors. Once Vertex Pharmaceuticals Inc. understood the biology of a disease, they use computers to design chemical drugs that do the job. Agouron already is testing a psoriasis drug on humans. Eventually, some therapies now in the lab might even eclipse the need for drugs as we

know them. Companies such as Genetic Therapy Inc., which raised \$14.5 million in an IPO last year, and Systemix Inc., based in Palo Alto, Calif., hope to one day transplant cells in patients that might permanently fix disorders. One approach to gene or cellular therapy would be to insert healthy cells that would churn out, for example, the enzyme missing in the inherited disorder A deficiency, which results in a se-

verely weakened immune system. Another approach might transplant genetically altered cells that make large amounts of natural agents to kill viruses or cancer cells right in the body. Eventually, scientists might be able to correct flaws in existing genes.

Such dramatic progress, coupled with the buoyant stock market, is giving small, technology-rich companies unprecedented leverage with drugmakers.

incrementally improve existing drugs. Biotech is now "the engine of drug development," says Hubert J.P. Schoemaker, chairman of 12-year-old Centocor.

For that reason, big drug manufacturers such as Glaxo, Sandoz, and Pfizer are spending hundreds of millions on research and equity investments in small companies. Last fall, Linda Sonntag wowed the Street by selling 60% of Systemix, a cell therapy company with no

Typically, a few years ago, a pharmaceutical house might have given a young company \$1 million a year for five years in research support in exchange for the right to sell the startup's drugs and pay royalties as low as 5%. Most early biotech companies didn't even sell their first products: Biogen, in Cambridge, Mass., was typical: Schering-Plough Corp. bought rights to its alpha interferon treatment for cancer and viral infections.

STUNNING PRICE. No more. Today, biotech companies command steeper equity prices, much higher cuts of the profits, and longer-term commitments. This new bargaining clout testifies to the power of biotech. The pipelines of pharmaceutical companies are crowded with compounds that only in-



BIOTECH BROKER BOCK: "MORE MONEY THAN I'VE EVER MADE IN MY LIFE"

ANTISENSE



messages from individual's DNA use disease. Antisense molecules block these genes in DNA. In therapy, antisense might keep the virus from multiplying in the body. Companies include: GENENTEX, GENTA, TRIPLEX, VERTEX

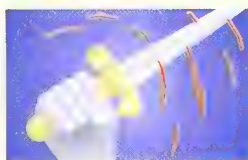
CHEMICAL SYNTHESIS



Traditional drugs with a twist. Early research uses biotechnology, rather than random screening of chemicals, to identify the most appropriate targets for drugs

AGOURON, ALKERMES, ATHENA, CAMBRIDGE NEUROSCIENCE, CEPHALON, GENELABS, GENENTECH, NEUROGEN, ONCOGENE SCIENCE, VERTEX

ANTIBODIES



These natural disease-fighters are the body's response to infection. Scientists hope to use them in treating disease-causing pathogens, such as viruses, and in curing autoimmune diseases

ALKERMES, CENTOCOR, CHIRON, COR, CYTOGEN, GENELABS, GENENTECH, IDEC, IMCLONE, IMMUNOGEN, IMMUNOMEDICS, REPLIGEN, T CELL SCIENCES, TANOX, UNIVAX, XOMA

PEPTIDE CHEMISTRY



Gene-spliced protein drugs are large and break down quickly in the body. Peptides are small fragments of proteins that can do what the larger drugs do but are more stable in the body. Some peptides are powerful killers of bacteria

AFFYMAX, CENTOCOR, CHIRON, COR THERAPEUTICS, ICOS, IMMULOGIC, MAGAININ

CELL TRANSPLANT/ GENE THERAPY



Early approaches hinge on transplanting either healthy or genetically altered cells to cure illnesses such as cancer, diabetes, or AIDS

ADVANCED TISSUE SCIENCES, APPLIED IMMUNE SCIENCES, CELLPRO, GENETIC THERAPY, SOMATIX, SYSTEMIX, VIAGENE

DATA: BIOVENTURE VIEW (SMITH BARNEY, HARRIS, UPHAM & CO., BW)

Just OK.



\$1249 HP® LaserJet® IIP+

Printhead warranty: 1 year
Conventional laser printhead
14 fonts, 2 typefaces
70-sheet paper tray
Curved paper path
Height: 8¼"

At \$999 list, there's no lower priced page printer on the market than the Okidata OL400.* Yet it offers many features you won't find on the \$1249 LaserJet IIP+.

Our solid-state LED printhead, for example, has *no* moving parts. It's so reliable, it comes with a 5-year

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Okidata OK!™



\$999 Okidata OL400

Printhead warranty: 5 years
Okidata-built LED printhead
(no moving parts)
17 fonts, 4 typefaces
Fully compatible with HP
Series II software emulations
200-sheet paper tray
Straight-line paper path—
feeds envelopes, labels,
heavy stock without jamming
Low profile: 5½"

tray—all standard. And unlike the LaserJet, Okidata gives you your choice of parallel or serial interface.

And the OL400 has one more unique feature—the Okidata OK! It's our promise that every printer we sell will deliver not merely acceptable performance and good value, but outstanding performance and excep-

tional value.

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THE COUNTRY COUSIN IS BLOSSOMING, TOO

Roger H. Salquist, chief executive of Calgene Inc., can smile as he tours his greenhouses in Davis, Calif. In a few months, he hopes to market the world's first genetically engineered, good-tasting tomato. The yellow flowers blooming in his hothouses are a treasure, too: The plants produce canola, which can be used to make non-polluting industrial lubricants, healthier cooking oils, and cheaper cosmetics ingredients. It's exciting stuff. Yet Calgene's market value of \$180 million trails that of many biomedical companies. "Everybody assumes if you can spell 'gene' you can cure Alzheimer's," says Salquist. "I've got to bury a guy in 50 pounds of oil before they believe me."

Calgene, two dozen other small companies, and several research efforts inside the likes of Monsanto Co. and Ciba-Geigy Ltd. are the ugly ducklings of biotech. A decade ago, they, too, embraced genetic engineering. But they took the road less traveled—into agriculture and industrial processes. So far, the payoff has been small: James McCamant, editor of the *AgBiotech Stock Letter*, says that less than \$200 million worth of ag biotech products are sold worldwide each year.

LEANER MEAT. That number should soon start to grow. This year, the industry could receive two key product approvals from the Food & Drug Administration. One is Calgene's tomato. The other, sold by Monsanto, American Cyanamid Co., and others, is called BST. It's a growth hormone that increases milk output in cows. Meanwhile, Calgene Corp. in Warren, N.J., has just won a contract from General Electric Co. for eight "bioreactors," the first such plants in the U.S. They use microbes to break down cancer-causing methylene chloride, an industrial solvent.

Ag biotech's weakness hasn't been a lack of markets: Total agribusiness revenues in the U.S. top \$1 trillion a year. Companies such as Biotechnica International, DNA Plant Technology,

Escagenetics, IDEXX, and Belgium's Plant Genetic Systems, have a roster of exciting projects: disease- and pest-resistant crops, alternatives to petrochemicals, animal drugs and vaccines, food safety tests, and ways to grow livestock with leaner meat. Companies such as Mycogen Corp. and Ecogen Inc. are replacing chemical pesticides with safer, less polluting "biopesti-

churn out a single protein to use in drug. And the industry is constrained by other forces of nature. "There's only one summer [a year]," notes Peter S. Carlson, chief scientist at Crop Genetics International Corp. in Hanover, Md., which is developing pesticide-producing bacteria that live inside corn plants. Researchers have to wait for growing seasons or for gestation cycles in animals to see if the experiments work.

BLUE YONDER. Even more frustrating is that while Wall Street cheers medical companies as if they were prizefighters, ag biotech companies are dodging bullets. Opponents such as gadfly Jeremy Rifkin and the Environmental Defense Fund argue that the long-term effects of genetic tinkering are unknowable, potentially dangerous, and not worth the risk. Their protests have delayed initial field trials of some ag biotech products.

It hasn't helped that the industry has been caught in regulatory never-never land. The FDA, the Agriculture Dept. and the Environmental Protection Agency haven't written final regulations governing the industry, in part because of an internal Administration battle over how to regulate ag biotech products. The industry is lobbying to break the logjam. But if the resulting regulations are seen as lax, say Margaret G. Mellon, the National Wildlife Federation biotech expert, "environmental groups will generate opposition as never before."

A lot rides on Calgene's Flavr Savr tomato. Calgene's technology blocks genes in tomato cells from making an enzyme that triggers rot. The tomatoes can be picked riper, so

they taste better and still withstand shipping. Salquist hopes the Flavr Savr will have a market of \$150 million annually by the late '90s. If it's a hit, it might dispel fears of ag biotech and grease the regulatory wheels—even without Calgene's fancy oils.

By Joan O'C. Hamilton in Davis, Calif., with John Carey in Washington and Julia Flynn Siler in Chicago



BIOTECH ON THE FARM

Product	Developers	Anticipated approval	Market potential Millions*
ROT-RESISTANT TOMATO	Calgene, DNA Plant, ICI	1992	\$150
BST (MILK-PRODUCTION HORMONE)	Monsanto, American Cyanamid, Upjohn, Eli Lilly	1992	300
INSECT-HERBICIDE-RESISTANT CORN	Crop Genetics, Pioneer Seed, DeKalb	1994	1,000
PST (LEAN PORK HORMONE)	Monsanto, American Cyanamid, SmithKline	mid-1990s	500
INSECT-HERBICIDE-RESISTANT COTTON	Monsanto, Calgene	1995	200

*Annual sales

DATA: AGBIOTECH STOCK LETTER; COMPANY REPORTS

cides" that use microbes, not chemicals, to fight pests. Still others are developing microbes that eat pollution. Monsanto alone has spent about \$1 billion in the past decade on ag biotech.

The problem is, none of this happens fast. Ag biotech lags behind biomedical companies in basic research, partly because altering whole plants and animals is trickier than making cells

duct sales, to Sandoz Ltd. for \$392 million.

flush with cash, biotech companies also do more. In the past, capital shortages have forced them to do "tri-," says John S. Saxe, head of Syner- Inc. in Boulder, Colo. That meant losing just one of several promising projects to take out of the lab. But now, they can back several horses. Saxe's

company, which last year had more than \$300 million, is testing its drug An- against septic shock and five other diseases, including leukemia and asthma. Without the cash the company might have devoted to or forgone testing some of those markets. More important, if one project bombs, the company won't disappear with it. "Progen, in Branford, Conn., has high hopes for an anti-anxiety drug it's NDC91-1. The \$50 million deal it signed in February for Pfizer Inc. to pick up development and marketing costs gives me a sense of Executive Whitcome's mind. "If the first compound doesn't work," says, "you have the withdrawal to survive."

ARMISHES. Still, survival requires beating big odds: only 2 out of 10 companies are likely to stay independent, says Max Link, CEO of Sandoz Pharma Ltd. and mines lurk everywhere. Drugs that work in the lab or in mice may not work in people. In the early 1980s, Alpha Interferon destroyed most cancer cells in test tubes, but worked more selectively in humans. Or a drug that works miracles in some patients may be lethal for others. The cancer drug Interleukin-2 causes fluid retention, which has killed some patients.

A good patent may guarantee 80% gross margins. But a patent skirmish

can bring disaster. Last year, Genetics Institute Inc. lost an appeal over a patent infringement on Amgen's anemia-fighter, EPO. Genetics Institute ended up selling 60% of itself to American Home Products Corp. for \$666 million.

The prolonged U.S. regulatory process precludes foreign-made clones from entering a market. But regulatory snafus torpedo even the most promising

companies. Cetus Corp. suffered such a setback with its flagship drug, IL-2. Cetus had \$150 million in the bank. But when the FDA requested more data on the drug last year and delayed its approval, Cetus' board sold out to its Emeryville (Calif.) neighbor, Chiron Corp., for \$650 million.

At this stage, no one can predict which companies will triumph. One key

gonna build a business.'" Promising all that, Rathman raised \$33 million in private funding to start Icos in 1990.

Indeed, capital is still the critical variable. The biotech companies that went public in the latest spree raised some \$35 million on average, enough to hold them for three to four years, says Mark Edwards, managing director of Recombinant Capital, a San Francisco biotech research firm. Still, it costs more than \$150 million to bring a drug to market. So "in two or three years, these companies will have another extraordinary need for funds," says G. Kirk Raab, Genentech's CEO. In a perverse way, the recent cash infusions could cause pain for everyone down the line. Says Stelios Papadopoulos, managing director of PaineWebber Inc.'s health care group and a biotech investment banker: "The more companies you have, the more money you need." And the more competition there will be for it.

The ability to return to the market will depend in part on getting a company's story out to investors, brokers, and fund managers. But today, "we have a crisis of coverage by sell-side analysts," says Papadopoulos. Smith Barney's Gilbert figures she's trying to track 50 companies.

Only those companies that make good on their promises will get analysts' attention. And only those that do so will easily raise more money. Thus, "by the middle of the decade," says broker Bock, "half these companies will have merged out." That may disappoint investors trying to find the next Amgen. Still, many companies that have sold out so far have netted their stockholders a handsome payoff.

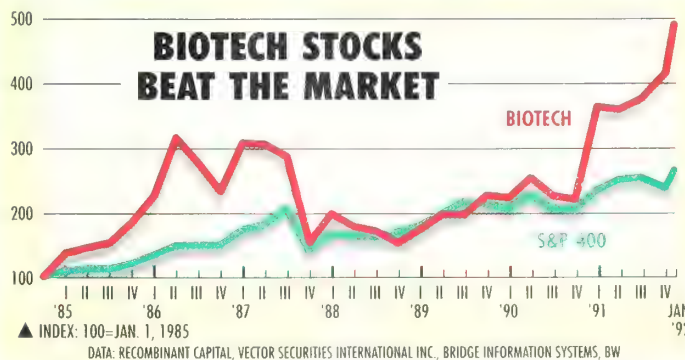
There's also another problem skulking in the future. Once biotech companies have a product to sell, they tend to charge a big premium: TPA, for example, costs \$2,200 per dose, while a full year's treatment with EPO can run \$5,000. Such prices are on a collision course with efforts to control escalating U.S. health care costs.

William R. Magruder, who oversees pharmacy purchases for Premier Alliance Inc., a buying cooperative of 48

THE NEXT GENERATION OF HOPEFULS

No one can say who the next Genentech or Amgen will be. But analysts are looking for the next success story to emerge from this sampling of young companies expected to begin turning a profit in the mid-1990's

Company Area of concentration	Initial offering	Current price (2/18)	52-Week High Low	Equity raised since 1991 (millions)
AFFYMAX Drug-discovery technology	12/91 20	29 1/2	41 3/4 22 1/8	\$92
CAMBRIDGE NEUROSCIENCE Nervous system drugs	6/91 12	9	22 1/8 14 3/4	\$42
COR THERAPEUTICS Anticlotting drugs	6/91 7 1/2	10 3/4	22 7 1/2	\$52
GENSIA Cardiovascular drugs	6/90 11	44	70 1/4 14	\$173
GILEAD Antisense technology	1/92 15	15 3/4	24 1/4 15 1/4	\$86
ICOS Inflammation	6/91 8	12 1/8	21 1/2 7 1/2	\$36
IMMUNE RESPONSE AIDS vaccine	4/90 7	26 1/8	62 3/4 6 5/8	\$88
MEDIMMUNE AIDS vaccine	5/91 9 1/4	32	55 10	\$61
REGENERON Nerve repair	4/91 22	17	23 1/4 9 3/4	\$99
SYNERGEN Septic shock/Arthritis drug	3/86 11	47 1/4	75 15 1/4	\$325
VERTEX New drug design	7/91 9	13	17 1/2 8 3/8	\$56



to prosperity, say fund managers and analysts, is a broad product line. Beyond that, George Rathmann, Amgen's founder and now chairman of Icos Corp. in Bothell, Wash., stresses such elusive notions as having smart people in the lab and the boardroom: "It's not enough to have a core technology," he says. "You need a body of coherent, leading-edge science, and people who say: 'We're

teaching hospitals based in Westchester, Ill., says 20% of his members' drug budgets go for a handful of biotech drugs. Magruder's study of Centocor's Centoxin, scared him. Some studies show that the treatment could cost \$24,000 for each year of life saved. "Can we afford to spend that kind of money?" he asks. At some point, the answer will be no. And since big profits are what make the

risk worth taking, the cash machine for biotech companies may then shut down.

Today, those concerns seem far away. Donald E. Guinn, the retired chairman of Pacific Telesis Group has directed Richard Bock, his broker, to plow his high-risk funds into biotech for the long term. Of course that's easy to do when, like Guinn, you're sitting on a 300% one-year gain. Still, even if investors desert

when yields look better elsewhere, he believes that the industry will thrive. After all, it's hard to find a more alluring dream: to cure disease, feed the masses, safeguard the environment—and make fortune in the bargain.

By Joan O'C. Hamilton, with Emily Smith in New York, Larry Armstrong in Los Angeles, Geoffrey Smith in Boston, Joseph Weber in Philadelphia

THIS GENETIC MAP WILL LEAD TO A POT OF GOLD

The essence of biotechnology is exploiting genes. Already, biotech companies have homed in on a few that make insulin or human growth hormone and have quickly produced new drugs. Scientific sleuths have also identified and deciphered the flaws in DNA that cause such inherited diseases as cystic fibrosis and muscular dystrophy. Their discoveries have yielded diagnostic tests and may eventually point the way to new therapies.

Yet these advances involve a mere fraction of the 50,000 to 100,000 genes in every human being. Within the spiraling strands of human DNA is a treasure trove of information. Who is likely to get heart disease or cancer—and how can those be prevented? How does the aging process work? Finding the answers is a tedious and expensive job: It cost \$150 million just to identify the gene that causes cystic fibrosis. Such projects would move faster and cost less if there were a map that showed where bits of DNA are located.

'DRUGS GALORE.' So, two years ago, scientists conceived the Human Genome Project, a 15-year, \$3 billion federal program to decipher humanity's genetic heritage. Billed as one of the great adventures of science—and as a key to keeping U.S. biotech companies ahead of such rivals as Japan—it will lay the foundation for a new leap in biology and biotechnology. "The objective is a new infrastructure for biology," says molecular biologist Leroy E. Hood of the University of Washington. Eventually, says Charles DeLisi, dean of engineering at Boston University and a founder of the genome effort, "this project will produce drugs galore."

Funded by the National Institutes of

Health and the Energy Dept., the agencies that oversee the work, scores of scientists have started the mapping by trying to locate genetic signposts spaced along the 23 pairs of human chromosomes. At the same time, researchers are drawing up similar guides to the genes of roundworms, fruit flies, and mice. This effort is critical, since species share many genes—and the best way to determine what these genes do is to conduct animal experiments. Long-term, with men and



VENTER: THE NIH WANTS TO PATENT THE BRAIN GENES HE FOUND

mice alike, the goal is to "read" each piece of DNA between the genetic signposts, a task called sequencing. That process will identify thousands of new genes, plus the pieces of DNA between them that control the body's genetic machinery. Once genes are found researchers expect a quick commercial payoff in diagnostic tests for such conditions as a predisposition to heart disease. New drugs are further away.

Indeed, it's too early to point to important accomplishments, says David J. Galas, who heads the Energy Dept.'s part of the effort. Still, there are tantalizing clues to how powerful the new

knowledge will be. The genetic map of the roundworm has helped California Institute of Technology biologist Paul Sternberg discover that a human cancer-causing gene called ras plays a key role in the division and function of cells during normal development.

A STORM. The promise of genome project has already raised the issue of commercialization. Last year, the NIH touched off a storm by applying for patents on 347 pieces of human brain genes sequenced by one of its biochemists, J. Craig Venter. On Feb. 12, the agency applied for 2,375 more patents. No one knows what most of these genes do, or where they are located on the chromosomes. And some experts fear that the NIH moves could prompt universities and companies to patent blindly every gene in sight, simply to lock up rights to them. "We are in charge of the genome project think this is a disaster," says Stanford biochemist and Nobel laureate Paul Berg, chairman of the NIH's genome advisory committee.

The NIH itself argues that merely publishing findings might keep them from being followed up, since only they are public it may be difficult to win a patent. That would limit potential. Some patent lawyers think the NIH filings won't survive, since bits of unknown genes may not be inventions worthy of protection. If they at the NIH promises to smooth commercialization.

So one way or another, whatever the Human Genome Project discovers will find its way to biotech companies. For an industry whose job is unraveling the unknown, that can only be a plus.

By John Carey in Washington

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CALIFORNIA'S NEXT CASH CROP MAY SOON BE...WATER?

Recent proposals would let farmers sell theirs to parched cities

Robert H. Swanson is fuming. After cutting water use at his company by 30% in each of the past two drought years, the chief executive of Silicon Valley chipmaker Linear Technology Corp. has just been told by the city of San Jose that he may have to cut back again in 1992. And he can't see how to save another drop. His beef: Farmers get 85% of the state's water at very low prices, and there's little left for industry. Until he gets a more reliable water supply, he vows: "I will absolutely not make any further investments in California."

It's getting so bad that even some farmers are starting to hurt. On Feb. 14, the U.S. Bureau of Reclamation said that for the first time, some growers won't get any water from its Central Valley Project, California agriculture's chief source. In part, this year's temporary cutoff is intended to protect runs of winter salmon, which are nearly extinct because of the drought. That's small comfort to farmers such as Ron Metzler, a 54-year-old wine-grape grower in Huron. "Without water," he says, "we're out of business."

But as California's chronic water shortages reach a crisis point, a solution may finally be at hand: The state is on the verge of instituting the nation's first large-scale market for water. Such a market would allow farmers with excess supply—such as those in the northern part of the state—to sell it to thirsty cities and businesses or even to other farmers, such as Metzler, who grow high-value crops. If the market for water works as planned, California could solve its problems without having to build huge new dams or reservoirs.

'BALANCE.' There's increasing evidence that markets for water could work. For example, an emergency water bank created by Governor Pete Wilson last year persuaded farmers in the North to sell enough water to supply more than 1 mil-

lion families, saving cities from severe cutbacks. And southern farms got enough water to avoid big losses. Moreover, preliminary studies indicate that rural areas didn't suffer greatly from land fallowing. Says economist Richard E. Howitt of the University of California at Davis: "You don't have to move massive amounts of water from ag to

USING THE MARKET TO EASE WATER SHORTAGES

THE CURRENT SITUATION

Farmers have the rights to 85% of the water supply, while cities and industry get only 15%, and at higher prices. In a drought, the government can temporarily divert farmers' water to cities

THE SELLERS

Farmers could sell some of their water at a market price. They wouldn't deliver the water themselves. Instead, the local water authority would divert the water from the farmers to the ultimate buyer

THE BUYERS

The water would be bought by urban water districts serving households and industrial water users. The fast-growing cities would get more water, because they are willing to pay the highest prices

DATA BW

cities to strike a balance." He estimates that by diverting just 7% of the water farmers now use, cities would have adequate supplies for the next 20 years.

To be sure, the new market still has to overcome formidable political and practical obstacles before becoming reality. For one thing, some observers fear that cities such as Los Angeles could bid up the cost of water high enough to price farmers, small towns, and environmental needs out of the market. It could also take years to rebuild the crumbling levees of the Sacramento River delta, which would have to carry most of the water being bought by cities at both

ends of the state. And if farmers sell too much water and stop growing crops, rural communities could dry up as support businesses close. Says Alexander H. Brand, a 78-year-old farmer in the Sacramento delta: "It's a one-way street; you go too far."

POWERFUL LOBBY. Nevertheless, after years of mockery, the idea of allowing the buying and selling of water has developed broad political support among environmentalists as well as hard-nosed CEOs. Within the next month, the California legislature will consider a bill to permit farmers to sell water on a regular basis. And the Senate subcommittee on water and power, headed by Sen. Bill Bradley (D-N.J.), will soon hear testimony on a bill that would ease restrictions on selling water from the federal subsidized Central Valley Project.

A prerequisite for setting up markets for water in California. At least one of these bills is likely to pass, since politically potent farmers, long opposed to giving up any of their cheap water, now seem willing to accept water market in principle.

Even with recent flooding in Southern California, the drought is entering its sixth year. And the Golden State suffers from a man-made problem as well: Many farmers have incentives to use more water than they really need. For example, farmers have exclusive rights to buy reservoir water as little as 2¢ per 1,000 gallons through the Central Valley Project. That supply can be cut off only in a severe drought—even then, many farmers pump groundwater to make up for the loss. By contrast, cities pay up to 50 times as much for their water comes mostly from the newer, more expensive State Water Project. And conservation is encouraged: Farmers can lose their water allotment if they don't use it all.

That means consumers must skimp on showers, and businesses must cut back while farmers plant water-intensive crops such as alfalfa and cotton. Yet the state, with its 30 million people, critically needs more water for its cities. Economists fear that further shortages could stop the economy in its tracks. A study by a San Francisco consulting firm predicts that if all California manufacturers had to cut water consumption by 30%, the state's annual economic output would fall by \$20 billion. "If we do

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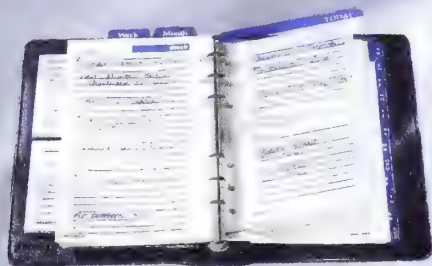
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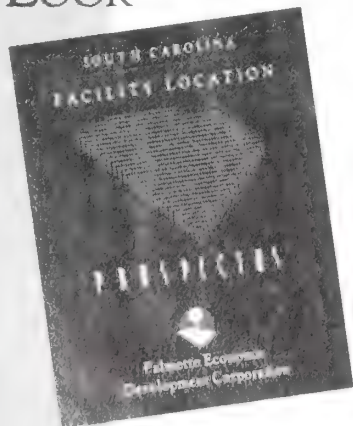
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Economics

have some kind of water market," says Bank of America economist Frederick Cannon, "we could bankrupt California."

Details of the proposed California water market aren't set yet, but the outline is clear. To mollify farmers, they will still own the rights to most of California's water. However, as the water flows off the snowy peaks of the Sierra Nevada and into rivers and reservoirs, farmers could sell it to whomever is willing to pay the most. Individual farmers could, for example, sell their water rights to their local water authority. They could then bid for the spare water, perhaps signing long-term contracts that guarantee their future supply. As a practical matter, actual transfer of water could be accomplished by turning a valve in a pumping station, or it might require building new storage facilities.

Some fear that cities such as Los Angeles would bid up the price of water, shutting small towns out of the market.

and beefing up existing waterways.

Proponents say almost everyone would benefit from a water market. Farmers who sold water would have fallow land or pump groundwater, and they'd be paid by cities for that water, at least as much as they'd get from growing crops. Otherwise, they would sell. Moreover, while they might have to pay higher prices for Central Valley Project water, their remaining supplies would be more certain. Cities could ensure supplies without building new projects, and even the environment might gain because large-scale new construction might not be needed. During shortages, rising prices would encourage local water districts to build reservoirs to catch the higher-value water. And farmers might put extra money earned from water sales into conservation equipment that would free up more water. The result: more stable supplies.

Throughout California's history, no one has created more contention than water. But the state's farmers and cities are coming to a rare agreement that some form of water marketing is inevitable. Without it, warns Michael McGee, executive director of the Bay Area Economic Forum, "urban California is going to rise up and say: 'We're taking the water.'" That's one kind of water transfer that farmers such as Alex Hildebrand are quite sure they don't want.

By Robert D. Hof in San Francisco

YEAR ROUND GOLF



COME TO

CATALONIA

AT FALL

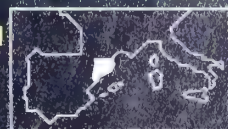


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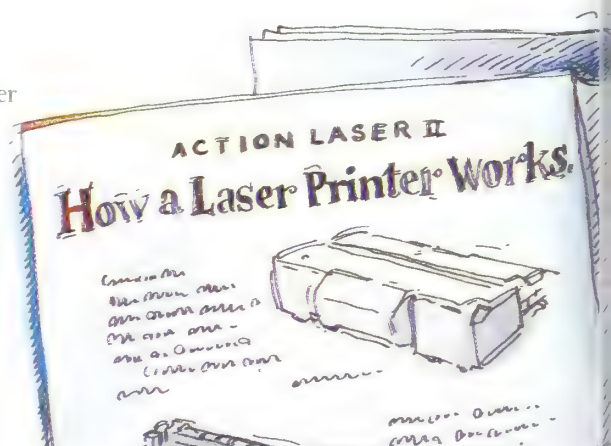
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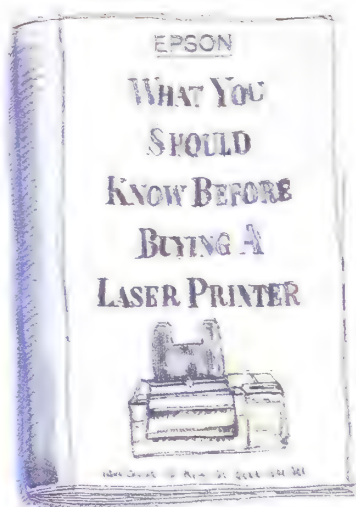
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MARKETS & INVESTMENTS

ARE STOCK PRICES TOO STIFF?

The market's p-e ratios may not be as dangerous as they look

Smithfield Foods makes ham, bacon, sausage—and so much money that shareholders have been dealing with delight. As profits rose sharply in 1991, Smithfield's share prices soared. But investors who bought into the Virginia-based company in recent weeks, expecting that earnings would rise 10% over the year before as predicted by analysts, found themselves misled with a pig in a poke. On Jan. 18, Smithfield stock slid 7% on the news that quarterly profits had fallen by nearly 30%. The earnings shortfall at Smithfield Foods Inc. typifies the dilemma facing stock market investors. Lofty earnings expectations have been driving the market ever higher for much of the past year. But if profits falter, as they did at Smithfield, shareholders could take it on the chin. Nowadays, brokerage-house analysts are predicting that earnings of companies in the Standard &

Poor's 500-stock index will advance 39% in the coming year. That would be a stunning reversal from 1991, when the S&P 500 companies saw their profits decline by 10.5%. The market, however, has taken this anticipated profit gain into account—by pushing price-earnings multiples to levels that are rarely seen. The Dow Jones industrial average is 52

times estimated 1991 earnings, three times the level of a year ago, while the S&P 500-stock index is 22 times expected 1991 earnings. And even using the 1992 earnings estimate, the p-e is still historically high: 15.6 (chart).

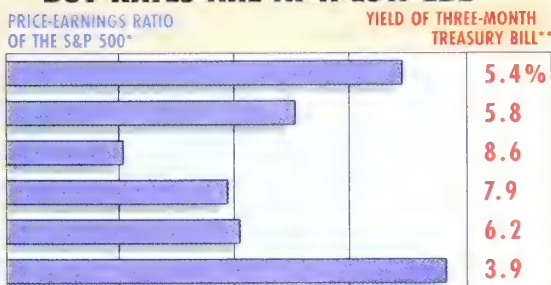
Is the market too expensive? With stocks treading water for most of the past few weeks, investors apparently are saying "Yes." But the market's p-e ratios may not be quite as terrible as they seem. The market valuations may well be justified by the same ultralow interest rates that have so antagonized savers. "You have to look at the p-e [multiples] from a monetary perspective," asserts Oppenheimer & Co. analyst Paul S. Rabbitt. One method used by Rabbitt is to look at the historic ratio of the earnings of S&P 400 industrial stocks, as compared with the yield of three-month Treasury bills. This analysis tells Rabbitt that the price-earnings ratio on the S&P 400 could rise from a current 25 to as high as 30 before it would become overvalued.

ROOM TO GROW. Rabbitt has a point. So long as rates remain low, and profits don't tank, the market should continue in high gear. "In terms of historical valuation experience, it might appear that stocks are overvalued," says Suresh Bhirud, who runs the Bhirud Associates research boutique. "But with rates below 4%, one can begin to make the argument that there is room for [price-earnings] multiples to expand." Bhirud notes that another valuation measurement, in which the dividend yield of the S&P 400 is divided into the yield of the three-month Treasury bill, indicates to him that p-e multiples have room to increase by another 20%.

Still, some market observers argue that the market's price-earnings ratios are moving to dangerous territory. They maintain that corporate profits will remain under pressure in the year ahead unless the economy revives more swiftly than expected. They point out that negative earnings surprises continue to pummel stocks and that estimate downgrades have outpaced upgrades by a 4 to 1 margin—a sign of earnings weakness. "I would have to say, from a valuation perspective, that stocks are looking pricey," reports Melissa R. Brown, who is chief quantitative analyst at Prudential Securities Inc.

One way of assessing the market's valuation is to calculate p-e multiples using projected 1992 earnings instead of 1991 profits. Proponents of this technique point out that investors tend to

YES, THE MARKET LOOKS PRICEY, BUT RATES ARE AT A LOW EBB



*AGGREGATE P-E OF EACH OF THE STOCKS IN THE S&P 500, BASED ON ESTIMATES OF THE COMING YEAR'S EARNINGS AS OF JAN. 15
**AS OF JAN. 15 OF EACH YEAR

DATA: ZACKS INVESTMENT RESEARCH, BW

ILLUSTRATION BY ROBERT NEUBERGER. CHART BY ERIC H. JOHNSON FOR BW

judge stocks on the basis of their expected earnings for the coming year and not the year just passed. This figure is sometimes calculated by using estimates of overall corporate profits by economists and market strategists—the “top-down” approach. But this year, because of a spate of corporate restructurings that have skewed such calculations, it seems better to use earnings estimates for each of the 500 individual stocks in the index. Using this “bottoms-up” approach, the p-e of the S&P 500 is 15.6, according to Zacks Investment Research, a Chicago firm.

ALL RELATIVE. A market p-e of 15 or higher is not unusual using the previous year's earnings, but is uncommon when looking ahead to the coming year. “I can't recall the number ever being that high,” says Benjamin Zacks, an executive vice-president of the firm. A year

By one estimate, the S&P 500's p-e is 15.6. ‘I can't recall the number ever being that high,’ says one analyst

ago, just before the market advance, the market was trading at 12 times projected 1991 earnings. That was typical. Over time, according to Zacks, stocks have tended to be priced at about 11 to 13 times their projected earnings in the year ahead (chart). Even at this time in 1987, he notes, the market was trading at just under 15 times projected 1987 earnings. “If a p-e of 12½ is fair value, then the market is 24% overvalued,” Zacks maintains.

Judged in isolation, this p-e spells trouble. But p-e ratios should not be judged in isolation. When compared with short-term interest rates, the number appears far less threatening. True, the market's p-e was 12 a year ago, but short-term rates were 6.2%—more than 50% higher than they are now. Adjusted for the difference in rates, that would make the market's p-e a year ago the equivalent of about 18.

At bottom, then, the argument about earnings and p-e ratios is all relative. “The biggest bear market in recent years took place in 1973 and 1974,” Bhirud recalls, “and that was when earnings exploded.” Back then, of course, rates were exploding, too. Today, the byword is deflation. So long as interest rates stay low, they will continue to take the sting out of those nasty-looking p-e numbers.

By Gary Weiss in New York

DEALS

THIS IS SOME WAY TO BUILD EMPLOYEE LOYALTY

Burlington's stock sale will trim debt—but slash the ESOP's holding

Rarely has a public offering of stock been the catalyst for a unionizing drive. But that's the case at Burlington Industries Equity Inc., where some workers are angry that the stock sale will zap their stake in the textile giant, held via an employee stock-ownership plan. Ironically, ESOPs are supposed to bind workers to their companies by giving them stock and linking their retirement nest eggs to corporate performance.

The Greensboro (N.C.) company will soon peddle 57 million new shares to the public in order to raise \$855 million to pay down the huge debt Burlington assumed when it was taken private by a leveraged buyout in 1987. After the offering, the public will own 83% of Burlington. The employees' stake, diluted by the

new issue, will be sliced from 49% to 3%. Meanwhile, due to Burlington's lackluster earnings, the value of their stock since the ESOP formation has slumped from \$37.80 to \$15 a share, the price Burlington hopes to fetch in its offering. “Employees expected a high share price and a say in their company,” says Joseph R. Blasi, an ESOP expert at Rutgers University. “Now, they've got a much leaner retirement piggy bank, and once again outsiders call the shots.” The company responds that any stock fluctuates.

BROKEN PROMISES? Burlington employees in a sense have been pawns in a complex set of maneuvers by the company's management and underwriters. Management arranged the \$2.1 billion buyout to fend off a raider. To raise the necessary debt, it enlisted Morgan Stanley, Equitable Life, and Bankers Trust, which in return got stock in the company. Two years later, management loaded on \$212 million in new debt to buy back the underwriters' shares and set up the ESOP, which replaced a lush profit-sharing plan as the main pension fund.

What rankles Burlington employees is that while their stake has been devalued, everyone else has prospered. Burlington

Chairman and Chief Executive Frank Greenburg, who was allowed to buy many of his shares at under \$15, stands to make at least \$900,000 in paper profits on the new offering. Morgan, lead underwriter, raked in \$56 million from the ESOP deal, plus \$116 million in fees. “Everything Frank Greenburg promised us never came through,” grouses sewing-machine operator James E. Corneal. Greenburg and Morgan

won't comment because the stock is in registration.

UNION VOTE. Using the ESOP issue as a rallying cry, disgruntled Burlington workers have enlisted the Amalgamated Clothing & Textile Workers Union to try to hold a union representation election at three of Burlington's 41 plants before the stock sale is over. The work-

may also launch a lawsuit similar to the one filed by Simmons Co. employees against stock in the Simmons ESOP plummeted 88%, to 50¢ per share.

The company argues that workers will be better off owning a smaller percentage in a healthier company. By paying down debt, proceeds from the new offering will halve the company's \$252 million yearly interest tab. The sale will directly benefit workers because part of the proceeds will retire early the debt incurred by the ESOP to buy its stock. Workers, the company notes, did not put any of their own money into the ESOP.

Workers would be a lot happier if the company's tomorrows looked bright. True, Burlington finally posted decent earnings (\$17.9 million) in the quarter ended Dec. 28, but that's after years of losses and a severe downturn in the textile industry. While the company contends its fortunes will improve, big problems remain: tough competition from imports and the sluggish economy. After the stock offering, debt will still be a hefty 60% of capital. To Burlington workers, the buoyant promise of the ESOP has turned into a fable.

By Walecia Konrad in Atlanta

BURLINGTON WORKERS WILL TAKE A BEATING

	After LBO	After stock offering
Stake in company	49%	3%
Per-share value of stock	\$37.80	\$15

DATA: COMPANY REPORTS



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Commentary/by John Meehan

AMERICA'S BUMBLING BANKERS: RIPE FOR A NEW FIASCO

When a former top bank regulator was asked to comment on the quality of management of the nation's commercial banks, he thought for a moment. Then, for 20 seconds, he laughed uncontrollably.

It would be an exaggeration to say all banking executives are a laughingstock. Still, look at their record over the past decade. Almost 1,500 banks have failed. Many if not most of the 12,000-odd survivors have suffered sharp losses, caused by seemingly pandemic lapses in judgment. First came a slew of bad loans to the oil patch. Then came bad farmland loans and write-offs on Third World debt. Finally, reckless lending on commercial real estate and leveraged-buyout transactions. In between, bankers found time to lose big in dubious deals with the likes of developer Donald Trump and media mogul Robert Maxwell, who were able to borrow millions on their signatures alone, with few questions asked. As banks plunge into the 1990s, they are writing off more than \$20 billion in loans every year—almost six times as much as at the start of the 1980s.

You would think bank executives might have wised up after this dismal performance. But you'd be wrong. Many management experts, academics, and bankers themselves complain that banks remain riddled with the mediocre management that has plagued the industry for decades. "I hope we learn from our mistakes," says John B. McCoy, chief executive of Banc One in Columbus, Ohio, and one of the handful of well-regarded bank managers today. Although McCoy thinks managers are improving, he adds, "we're starting from a very low base." Despite Banc One's stellar performance, McCoy rates his own management as a 3 or 4 out of a possible 5. "There isn't a 5 in our industry," he says.

TWICE SHY? A recent survey of CEOs at the top 300 banks seems to support McCoy's assessment. Conducted by Heidrick & Struggles Inc., an executive recruiter, in conjunction with *American Banker*, a trade paper, it found that more than 40% of the respondents felt that most bank CEOs didn't have the skills to provide leadership in a deregulated environment. More than half believed banks lacked sufficient management depth.

Lack of skills could be even more cost-

ly for banks in the 1990s than in the 1980s. The financial-services market is becoming intensely competitive. If bankers can't overhaul management, another loan fiasco—perhaps worse—seems certain. "My guess is we'll be caught again," says Terrence Murray, chief executive of Fleet/Norstar Financial Group Inc. in Providence. He gives the industry 10 or 15 years before another crisis. Others aren't so optimistic. Consultant David C. Cates believes banks may have only five years' grace: "Institutional memories are very weak."

It's true that the industry's problems can't all be blamed on bankers. Banks have often been hobbled by ill-conceived, overlapping state and federal regulations. They are required by law to serve such social needs as providing credit to poor neighborhoods, which sometimes conflicts with their goal of maximizing profits. And they have been inhibited from setting up interstate networks and diversifying into other financial services, which has made them more vulnerable to challenges from such nonbanks as Fidelity Investments and General Electric Capital Corp. But none of this accounts for the industry's record of blunders.

Why are bankers so consistently maladroit? The main reason is more than half a century of business in a sheltered, hidebound, predictable environment. Legal barriers helped protect banks from competition from other banks and outsiders. Deposit insurance and access to the Federal Reserve's discount window virtually guaranteed the survival of even the most pitifully run institutions. And hostile takeovers were unheard-of.

The rule of "the three 3s" summed up the challenge of being a bank executive: Borrow at 3%. Lend at a 3-point spread. And be on the golf course by 3 p.m. "You had an industry where there was damn close to a guarantee that you would have some kind of profit," says Wayne Lewin, a management expert at the Bank Administration Institute.

Executives attracted by this comfortable way of life did not tend to be go-getters. Banks usually hired people who

were good at taking orders and plishing well-defined, routine tasks. Banking culture is dominated by who want a less demanding career. Cates. "It's more like government."

Bank boards did little to help things. Directors in most industries loath to interfere, but bank boards have been particularly timid. T

BANKING'S BLACK HOLES

OIL

Financed drillers in anticipation that oil prices would keep going higher. Prices started collapsing during 1981-82.

FARMLAND

Lent to farmers who were expected to prosper from rising agricultural prices. Prices dropped sharply in 1981-82.

THIRD WORLD

Recycled petrodollars during the 1980's to less-developed countries, promised they would repay their loans. Most didn't.

COMMERCIAL REAL ESTATE

Lent to developers and investors who seemed certain to reap the benefits of soaring real estate values. Prices plummeted in the late 1980s.

LEVERAGED DEALS

Financed buyout firms that planned to make a killing taking companies private. Unable to handle the debt, many went bankrupt in the late 1980s.

directors were recruited from the ranks of local business leaders. Many were mutual or potential customers. And they didn't understand the intricacies of banking. In 1989, just weeks before Bank of England Corp. revealed the depths of its real estate problems, several directors purchased shares in the bank.

The dangers of poor management practices became all too obvious in the 1970s and 1980s. Big losses on real estate investment trusts during

were but a harbinger of the credit debacles during the '80s. The force behind the bad loans was not the banks' best customers, but the banks' best customers, bypassing banks to borrow directly from the market via commercial paper rather than shrinking lending or fee-based activities, banks fell victim to themselves lemming-like chasing after more risky borrowers.

There is not a lot of evidence that banks have learned enough to avoid repeating their mistakes. Despite the horrendous performance, only a handful of CEOs, such as Walter J. Conner of Bank of New England and A.

ordos when it comes to customer service. "A customer who wants a loan is treated like a bad guy," says David Stone of New England Consulting Group. "The question bankers ask themselves is: 'How is this person going to screw me in two or three years?'" Likewise, bankers still show little inclination to vary loan pricing. Good and bad credit risks often pay the same.

And most bankers are still uncomfortable with marketing. Notable exceptions with credit cards aside, banks aren't good at selling. "There's a lot

on Third World loans, J. P. Morgan & Co. revamped its lending in the late 1980s and avoided debilitating forays into commercial real estate and LBO lending.

Other banks have shown commendable marketing savvy. At Fifth Third Bancorp in Cincinnati, every bank officer is required to make cold calls. The bank also conducts highly effective sales blitzes, in which 20 or 30 account officers descend on a region's local businesses for a day.

POP PSYCHOLOGY. When it comes to customer service, Seafirst Corp. in Seattle, a unit of BankAmerica Corp., has been a standout with its McDonald's-style approach. Individual branches are treated as franchises. Branch managers do all the hiring and set the hours to suit the local market. Seafirst also has 350 automated teller machines, which not only do standard banking tasks but also sell stamps and bus passes.

Other banks have proved to be innovative in motivating staff and dealing with the low morale brought on by heavy layoffs. After a cost-cutting plan that eliminated 700 jobs last year, CEO Samuel A. McCullough of Meridian Bancorp Inc. in Reading, Pa., helped relieve the tension by inviting 900 of his employees to a catering hall for a party. As guests entered, they were given a balloon, a marking pen, and a pin. They were asked to write on their balloons the name of some person or event they wanted to erase from their memories. "I told them all that McCullough was spelled with two C's and two L's," Meridian's chief recalls, although he doesn't know how many wrote his name. On command, everyone burst the balloons. McCullough has followed up with periodic phone-in sessions called "Just Dial Sam," in which employees can question the boss about the business.

Instead of figuring out better ways to manage their businesses, too many bankers these days are taking comfort that the worst of the crisis seems to be over. And they're congratulating themselves that they were able to survive, albeit with battered balance sheets. But merely overcoming the latest lending crisis is no longer enough. At the same time as competitors are whittling away at banks' once-inviolable franchises, legislative efforts to give banks expanded powers have made little headway. And taxpayers are getting tired of bailouts. Banking in the 1990s, in sum, will be even more demanding than in the 1980s. Bankers had better learn to master it, if the criticism—and the laughter—about their abilities are to die down.



Abboud of First City Bancorp of Chicago, have lost their jobs. Many, however, of the CEOs responsible for the billions in loan write-offs continue to show up for work every morning.

Another bad sign is that banks haven't improved much better at even their less-demanding functions. At a time when the faith in banks is sagging and customers are being lured away by more attractive financial products elsewhere, banks still have some of the worst rec-

ords of noise about quality service," says consultant David Partridge of Towers Perrin. "But bankers still have a grocery-store mindset: Open the doors, and the customers will come."

There is no genetic reason that impels bankers to be lackluster. In fact, there are a fair number of well-run institutions. Several banks, such as KeyCorp in Albany, N. Y., and Banc One, have managed to avoid getting battered by bad loans. Although it suffered big write-offs

BY GENE G. MARCIAL

SUDDENLY, IT SEEMS AS IF ALL HANDS ARE ON DEC

Few pros are ever neutral on Digital Equipment, one of the most volatile technology issues around. "You either hate it or love it, just like a cult stock," says money manager Tony Hitschler. The stock of this major mini-computer maker hit a peak of 190 in 1987, just before the October crash. Since then, it has been on the skids, sliding as low as 49 in mid-December.

But a recent wave of buying by some big investors has boosted DEC more than 10 points, to 60, in just three weeks. "This time, we believe it's all-go," says Hitschler, president of Brandywine Asset Management, which oversees \$1.4 billion. He thinks the stock will run as high as 90 over the next 12 months.

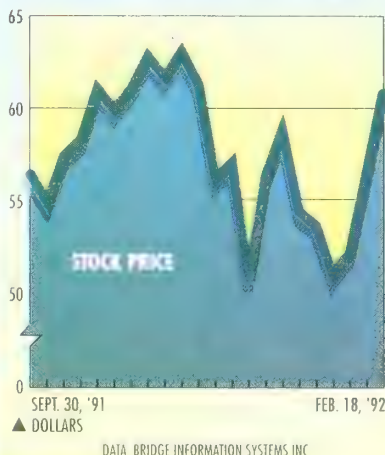
This new bullishness goes beyond the recent developments at the company (page 38). DEC has announced that it will soon introduce a high-speed Alpha computer chip and that it has signed licensing and manufacturing alliances with Microsoft and Novell.

"Even without Alpha, DEC's investment picture is rapidly changing," says Hitschler. "We've been buying heavily because we now see Digital as a value stock—greatly underpriced based on its book value, cash on the balance sheet, and most other value measures." He notes that in the past five years, the stock has moved from overvalued to ridiculously undervalued.

Hitschler is impressed by the company's \$1.7 billion in cash and its debt of just \$44 million. On a price-to-cash ratio, the stock is selling at 8½, vs. 15 for the Standard & Poor's 500-stock index. As for book value, DEC is selling at one times book of \$61.50 a share, vs. the S&P 500's three times, he notes.

SOFTER SPOT. "We see very little risk at its current price," says this pro. Plus, DEC is turning more and more into a competitive software company, he notes. Its hardware operations, which have been losing money, account for 50% of sales, which is expected to drop to 40% by 1993, says Hitschler. Software and services, which are making money, are expected to account for 50% of sales by '93, up from 40%, and "on even wider margins because of Digital's new products," he adds. In addition to the Alpha chip, DEC's PATH-

DIGITAL EQUIPMENT: TRYING TO TAKE OFF



WORKS networking software is fueling his enthusiasm.

DEC is expected to post a loss for the year ending June 30, 1992, vs. earnings of \$3.17 in fiscal 1991. But analyst Marc Schulman of UBS Securities figures DEC will earn a hefty \$5 a share in fiscal 1993. "Judging by the recent upward move in the stock," says Schulman, it appears that investors are beginning to take notice of this "former outcast."

THIS JACKPOT MAY SOON SWELL

Shareholders of Jackpot Enterprises have been waiting a long time to hit—you guessed it—the jackpot. Many impatient investors have bailed out. But the patient may soon be rewarded, say some pros. The stock is sending off sparks, rising from 7 to 11 on the Big Board since December.

"Jackpot could easily double from here based solely on the prospects of an expansion of legalized video-lottery terminals," says investment adviser Charlie La Loggia. "Video gaming will be a growth industry in the 1990s, and Jackpot is a natural play in it."

The company owns and maintains some 3,000 coin-operated slot- and video-poker gaming machines in high-volume retail stores in Nevada, including Kmart, Lucky Stores, Vons, Phar-Mor, Albertson's, and Payless Drug Stores. It also owns two casinos in Nevada and has a minority interest in a South Dakota casino.

Jackpot Chairman and CEO Neil Rosenstein is confident that the company will soon be doing business in three to

four additional states where video-lottery terminals are expected to be authorized. So he's certain that his goal of upping Jackpot's installed machines to 3,500 this year is in the bag.

Initially, the company will bring video-lottery machines to South Dakota, says Rosenstein. Iowa, Louisiana, Mississippi, and Oregon are the other states that he expects to authorize video-lottery machines this year. Experienced gaming-machine operators will be important to these states, says Rosenstein, and "Jackpot's financial position and reputation puts us in an enable position to take advantage of these emerging markets."

Analyst Ken Gassman of Davenport & Co. of Virginia sees earnings jumping to 45¢ a share for the year ending June 30, 1992, vs. last year's 25¢, and to 75¢ for fiscal 1993.

A COOLING PLAY THAT'S HEATING UP

York International is a creation of the 1980s. Spun off by parent Borg-Warner in 1986, York became a publicly traded company only to be swallowed up two years later by an investor group in a leveraged buyout. Well, guess what? York International, maker of heating, air-conditioning, and refrigeration products, is back, taken public again last October by its owners at \$23 a share. The surprise is that even though York's business is tied to housing and construction, its stock has been doing very well indeed—trading now at 34.

The investors who helped hoist York there may have noted 1991's record sales of \$1.6 billion, with operating earnings of 56¢ a share. Plus, if some pros who are buying are right, the company's outlook is rosy in spite of the recession. "We see earnings improvement ahead," says Kemp Fuller of New York's RAS Securities. His estimates: \$2.10 a share in 1992 on projected sales of \$1.8 billion, and \$2.75 in 1993 on sales of \$2.1 billion.

What's York's secret? Some 40% of its business comes from overseas. Also, 70% of its total business is in commercial refrigeration, where the major customers are in the noncyclical food and beverage industries. York sees more growth abroad, specifically in the Pacific Rim countries, as well as in Latin America, where demand for refrigeration and ventilation equipment is strong. Fuller figures the stock will hit 55 over the next 12 months.

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Georgia-Pacific



COLD FUSION ISN'T DEAD IN THE WATER YET

Scientists around the world are discovering something tantalizing—but what is it exactly?

Last summer, Robert T. Bush came up with the kind of theory that will brand him as either a genius or a crackpot. Bush, a physics professor at California State Polytechnic University, claims to be producing energy by means of a nuclear reaction in an apparatus filled with nothing more exotic than distilled water and a few common electrolytes. Further, he says, the technology could be made practical within a decade for generating electricity. If so, Bush declares, the upshot will be "even more important than the breakthrough a few years ago in warm superconductors."

If it all sounds familiar, it should. Three years ago, chemists B. Stanley Pons and Martin Fleischmann triggered a scientific frenzy by announcing that they had achieved fusion—the nuclear reaction that powers the sun—in a jar. In their experiments at the University of Utah, they claimed, deuterium atoms fused inside a palladium rod, giving off enough power to promise a new era of cheap energy. After a roller-coaster ride from all the rage to outrage, their discovery of "cold fusion" was branded as dubious at best. The subject largely disappeared from such journals as *Nature* and *Scientific American*.

STUMPED. But faith in cold fusion—or something like it—survives among a determined band of researchers. Around the world, more than 200 of these Don Quixotes are pursuing their quest and claiming to make progress. Some remain fixated on the

idea of cold fusion: Pons and Fleischmann have retreated to France, with unnamed backers funding their work. Others, such as Bush, suggest that the power they claim to obtain is coming not from traditional fusion of forms of hydrogen but from more esoteric reactions that also violate conventional theories of physics.

What all this research will produce remains to be seen. Critics say it adds up to nothing resembling classical fusion. But even a few skeptics agree there is tantalizing evidence that experiments

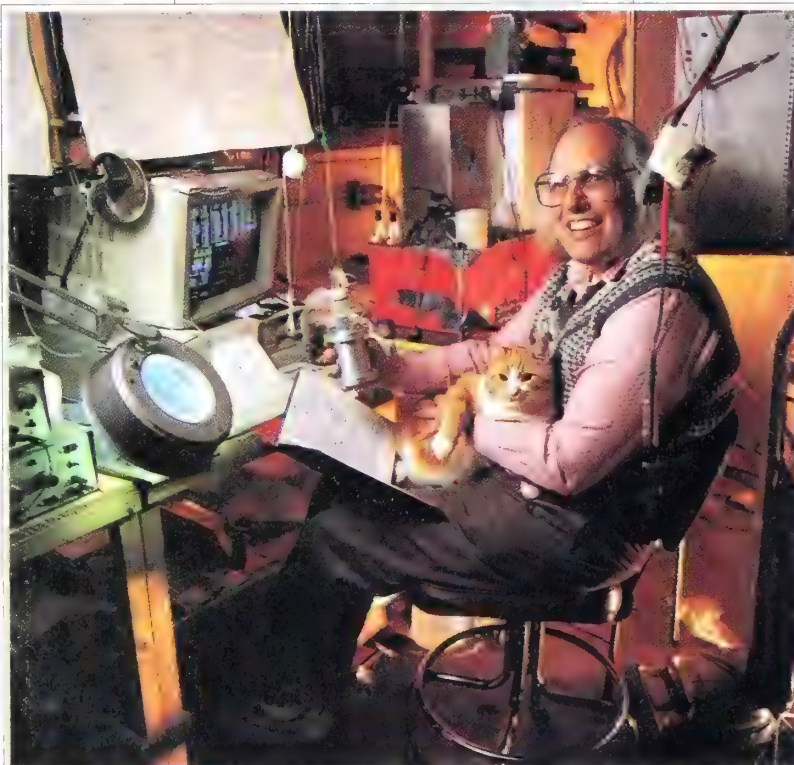
are turning up something unexplained. And the Electric Power Research Institute in Palo Alto, Calif., the utility industry's research arm, wants to crack the secret of whatever-it-is. After plowing \$10 million into the effort since 1989, EPRI has budgeted \$3 million this year alone.

What it's looking for may solve a mystery at SRI International in Menlo Park, Calif., which gets most of the utility industry's money for what EPRI now calls "heat production phenomena" research. On Jan. 2, a flask the size of a thermos bottle exploded in the face of SRI researcher Andrew

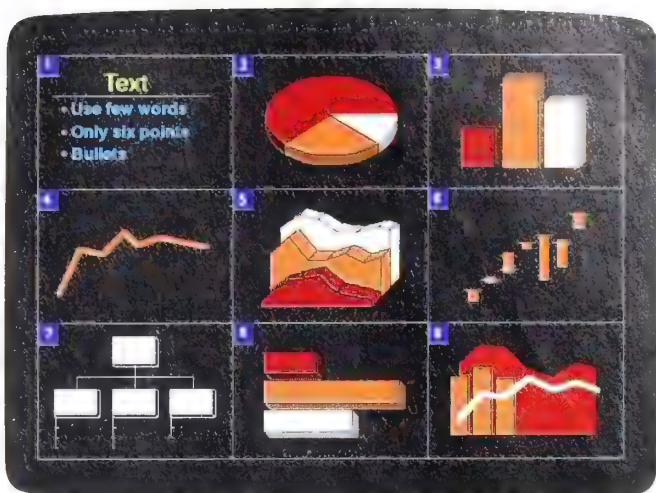
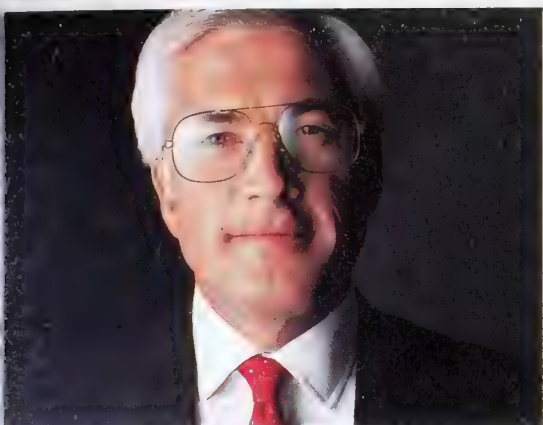
Riley, one of Pons' original associates, hitting him instantly. Several weeks later, "the investigators are stumped," says J. Taylor, EPRI's vice-president for nuclear research. Cold-fusion skeptics think it's merely an unfortunate lab accident, having nothing to do with a clear reaction.

TURNABOUT. The current claims fall into at least two distinct camps. Some researchers, such as Pons and Fleischmann, still claim their miracle in experiments in which an electric current is passed between a platinum wire and a palladium rod immersed in water made from deuterium, a heavy form of hydrogen. Theoretically, deuterium atoms can fuse, giving off massive energy, in the form of heat, than is contained in the electric current.

From his lab in New York, Fleischmann says that his experiments are still giving results that cannot be explained away as some kind of chemical



FERMLAB'S DROEGE KEEPS AN OPEN MIND
WHILE PURSUING COLD FUSION IN HIS BASEMENT:
'IT'S JUST FUN TO BE OUT THERE ON THE EDGE'

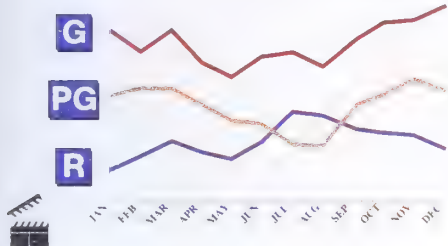


1. Know your audience. To know them is to understand them and to understand them is half the battle.

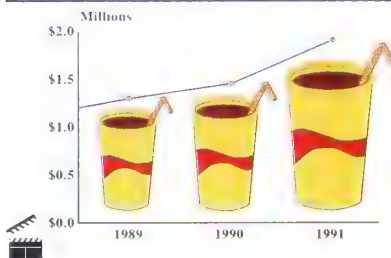
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reaction. "For these very high levels of heat," he insists, "it's got to be nuclear." Even some former skeptics are impressed. Last October, Heinz Gerischer, an electrochemist at Berlin's Max Planck Fritz Bader Institute, called on scientists to reconsider cold fusion. Prior to that, he had been one of the theory's biggest critics in Europe. His change of heart stemmed from a meeting last summer of some 200 cold-fusion stalwarts who had retreated to Lake Como in the Italian Alps to share their latest findings. Gerischer was particularly intrigued by reports from 50 labs of neutron radiation (table), which should be a byproduct of a traditional fusion reaction. "I don't see any absolute proof," he says. And indeed, the level of neutrons observed so far doesn't account for all the heat that researchers are claiming to get. Still, Gerischer adds: "I believe that another systematic investigation should be made."

If most scientists find Pons's and Fleischmann's claims hard to swallow, wait until they hear what Cal Poly's Bush and others are saying. This new round of theories started with Randell L. Mills, president of HydroCatalysis Power Corp. in Lancaster, Pa., who claims to produce heat using plain distilled water. When Bush was asked about that at Lake Como, he had an inspiration. "It suddenly dawned on me," he recalls, "that the major reactant that Mills is using (in the water), potassium-39, plus a proton from light water, would give you calcium-40." His theory is that potassium in the water combines with a proton at the edge of the palladium rod in a nuclear reaction that may not even be fusion.

OUT OF TOUCH? Bush and his collaborator, Robert D. Eagleton, also a physics professor, claim that when they set up a Mills experiment it produced even more heat than their Pons-Fleischmann cell. And when they looked for calcium-40, it was there roughly in the predicted amount—though Bush acknowledges he could just be measuring contaminants in the water. Next they used sodium, which Bush's theory predicts could combine with a proton to make magnesium. It produced nearly twice as much heat as potassium-laced water, Bush says.

To John R. Huizenga, a professor of physics and chemistry at the University of Rochester and co-chairman of a gov-

ernment panel that reviewed the original cold-fusion experiments, this is just one of many bizarre theories that cold-fusion advocates have come up with. He says, for instance, that the laws of physics make the fusion of potassium atoms with protons many times less likely than fusion of deuterium atoms. "These guys have lost all reality," he adds. Bush concedes that his explanation is outside the realm of accepted physics. "I can't tell you how the nuclear trick works," he says. But he insists that he has stumbled onto "modern alchemy."

EPRI's Taylor is thinking along similar lines. The energy gains he says EPRI-funded researchers are getting—10% to

mathematical error. And they accuse the prestigious journal *Nature* of refusing to publish a letter that they claim is the mistake. Baloney, retorts Lindley, *Nature's* associate editor of physical sciences. The letter, he just didn't hold up to scientific standards. **'MENTAL CONSTIPATION.'** In fact, more bad news ahead for cold fusion: a new study by scientists at General Electric Co., to be published this spring in the *Journal of Electroanalytical Chemistry*, is "devastating," says E. L. Park, a University of Maryland physicist who has reviewed it. One of the few companies to sign confidentiality agreements with the Uni-

versity of Utah, giving the company access to the details of the Pons-Fleischmann experiments. The researchers at GE say the work was flawed.

"We find it difficult to explain the results they get if the procedures they use are correct," they say they are. GE physicist Ronald Wilson. In fact, the experiment that was set up yielded access heat. Pons-Fleischmann asked the journal to let them write a rebuttal; they haven't done yet. That may explain

why Fleischmann feels it's not worth replying to critics: "Those people got mental constipation about this thing," he says. That's an odd way to win over doubters, counters Keith Lynn, a senior physicist at Brookhaven National Laboratory. "These people have to stop feeling they are out of science. They need to show how their experiments are done."

That's the spirit in which Thomas Droege is working. An electrical engineer at Fermi National Accelerator Laboratory in Chicago, Droege has in his basement what may be the most elaborate calorimeter, the tool to measure heat produced in cold-fusion tests. Since December, it has been taking data from a Mills experiment. Droege is watching until the wee hours to see if he can "prove the idea, disprove it or decide it's due to experimental error." For Droege, it's all less quest than venture. "I'm tired of science that is servative and safe," he says. "It's fun to be out there on the edge."

By Otis Port in New York, with Carey in Washington, Robert Burton in Boston, and Neil Gross in Tokyo

SPOTTING TELLTALE SIGNS OF FUSION?

When atoms fuse, energy is released and certain byproducts result. Finding telltale byproducts, then, is one key to whether a reaction is fusion. No researcher has seen enough byproducts to account for the heat that cold-fusion experiments are producing. And only some labs doing fusion research have found any byproducts. Here are the latest results:

Fusion byproducts	Number of labs detecting	Reaction among skeptics
NEUTRONS (N)	50	Gaining some acceptance
TRITIUM (T)	40	Attributed to error or contamination
HELIUM-4	6	Attributed to error or contamination
N + T	4 to 10	Strongly doubted or dismissed
N + T + GAMMA RAYS	0	If verified, should be convincing

DATA: TEXAS A&M UNIVERSITY, LOS ALAMOS NATIONAL LABORATORY, BW

20% more than is pumped into the cell—are inexplicable in chemical terms. So it would appear to be nuclear, Taylor says, "but it's not fusion as we know it."

Another unorthodox theory comes from Akito Takahashi, a physicist at Osaka University. He aims to explain why heat seems to be generated in bursts of varying duration during experiments, as some researchers have reported. The answer, he believes, isn't the fusing of two nuclei but of three—or perhaps even four—producing tritium and neutrons as byproducts. Huizenga debunks this theory, too. Getting two nuclei to fuse is tough enough, he says, "and when you require three or four to bump together, the chances of success go down." Takahashi agrees but insists that his findings are possible within the confines of a palladium rod.

Professional animosity is becoming a way of life for cold-fusion advocates and their detractors. For instance, Vesco C. Noninski, a Bulgarian electrochemist, and Melvin H. Miles, a chemist at the Naval Weapons Center in China Lake, Calif., say one series of often cited negative experiments is flawed by a mathe-



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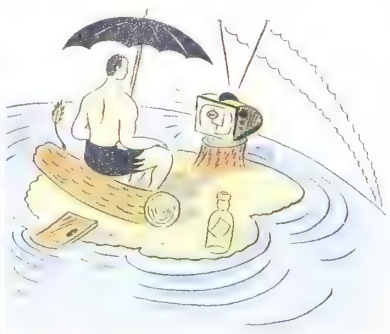
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Developments to Watch

EDITED BY FLEUR TEMPLETON

MAKING DIGITAL TV GO THE DISTANCE



Unlike current analog television broadcasts, digital TV pictures would be free from annoying "snow." And because more information can be packed into the signal, digital technology would allow efficient transmission of high-definition TV. But here's the problem: the dreaded "edge effect."

With today's TV sets, reception gradually gets

worse farther away from the broadcast tower. TVs tuned for digital signals would get a crystal clear image—or no picture at all. Where the signal cuts out depends partly on the weather, so TVs in outlying areas might suddenly go blank.

Martin F. Vetterli, co-director of Columbia University's Advanced Image & Television Laboratory has a solution. A mathematical technique known as wavelets selects key parts of the picture in order to create a multi-tiered signal. One tier provides a full HDTV image, while another omits extra detail but travels farther. A third contains only basic information to give a lower-quality, but still viewable, picture. Vetterli has tested the technique in the laboratory with promising results.

GENE DETECTIVES NAB A CULPRIT THAT CAUSES DEAFNESS

At the Boston University School of Medicine, researchers have discovered a gene, called HuP2, that plays a key role in congenital deafness. The BU team, led by Dr. Aubrey Milunsky, tracked six generations of a family in Brazil. Scientists examined the DNA of 60 family members—26 of whom had Waardenburg syndrome, a rare disease that can cause deafness and other symptoms. The researchers also studied 50 unrelated people who did not have the disease.

The tests showed that the HuP2 gene had mutated in all of those who had the syndrome, while there was no defect in the gene of the unaffected family members or the control group. The discovery will enable scientists to make a precise diagnosis of the syndrome and provide genetic counseling, Milunsky says. He believes gene therapy might one day enable physicians to repair the defect. In addition, he says, the research may yield new insights into how genes switch on and off during early development.

'NUCLEAR FALLOUT' THAT MAY HELP MANUFACTURERS

Talk about turning swords into plowshares. Researchers at Sandia National Laboratories in Livermore, Calif., have joined with John Deere Co. to adapt an ultraprecise welding system used in making nuclear weapons to the mass production of tractors and other heavy agricultural equipment.

In the Sandia process, a fiber-optic cable monitors the light emitted during a weld. Because the amount of light is an indication of how much metal has melted, a computerized

welder can use the data to adjust its welding current. Holding the light level steady ensures a very uniform weld. And this leads to higher quality and reduces the need for testing components after the fact.

To convert the system to civilian work, engineers have modified the technology to use common carbon steel instead of high-grade stainless steel. Next, they have to switch from the military's precise but costly tungsten arc welding to the common gas metal arc welds. Sandia plans to license the technology, but Deere won't be the only beneficiary. The company has teamed with the Edison Welding Institute, an industry-funded research and development organization in Columbus, Ohio, to perfect the process and get other manufacturers to try it out.

A WAY TO WHIP CHOLESTEROL OUT OF EGGS

Go on a low cholesterol diet, and one of the first things you'll have to cut out is eggs. That may change. Maryland-based Michael Foods Inc. and Germany's SKW Nutrition Products Inc. soon will begin marketing Simply Eggs—liquid eggs with 80% of the cholesterol removed. Unlike conventional egg substitutes, which contain only egg whites and additives, the liquid eggs are nutritionally identical to real eggs, except for the reduced cholesterol, says Richard G. Olson, Michael Foods' president and CEO.

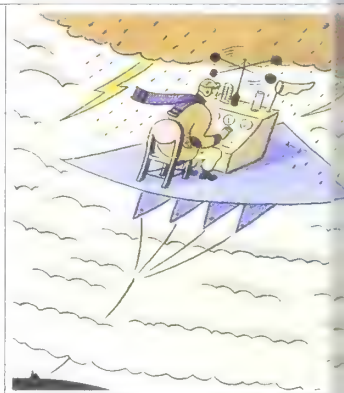
The cholesterol is removed from the eggs using a patented technology developed by SKW. First, a modified starch called beta cyclodextrin (BCD) is mixed with egg yolks. BCD competes with the cholesterol in the yolk, and the mixture is removed in a centrifuge. Then the egg whites are added back to the residue. The pasteurized product looks like whipped egg whites.

Limited production has begun at a pilot plant in Gaylesville, Minn. The product—packaged in refrigerated milk cartons—should hit grocery stores later this year. It will also be sold in restaurants and commercial food processors.

ATMOSPHERE SCIENTISTS WHO SAY: 'GO FLY A KITE'

What's a good way to gather climatic data in the upper atmosphere? Fly a kite. Tethered weather balloons can't go much above 9,000 feet, and higher-flying untethered balloons or airplanes can't take measurements in one place over a long period. But scientists from the University of Colorado's Cooperative Institute for Research in Environmental Science (CIRES) kept two high-tech kites aloft at 12,000 feet for four days last summer over remote Christmas Island, just north of the equator in the Pacific Ocean.

Based on that success, CIRES researchers believe they can fly a larger, 1,000-square-foot rectangular kite on a high-strength Kevlar tether for weeks or months at 60,000 feet. Each kite could hold up to 22 pounds of instruments to measure such things as water vapor, radiation, ice-crystal structure, electric fields, or temperature—information that would then be relayed digitally to computers on the ground.



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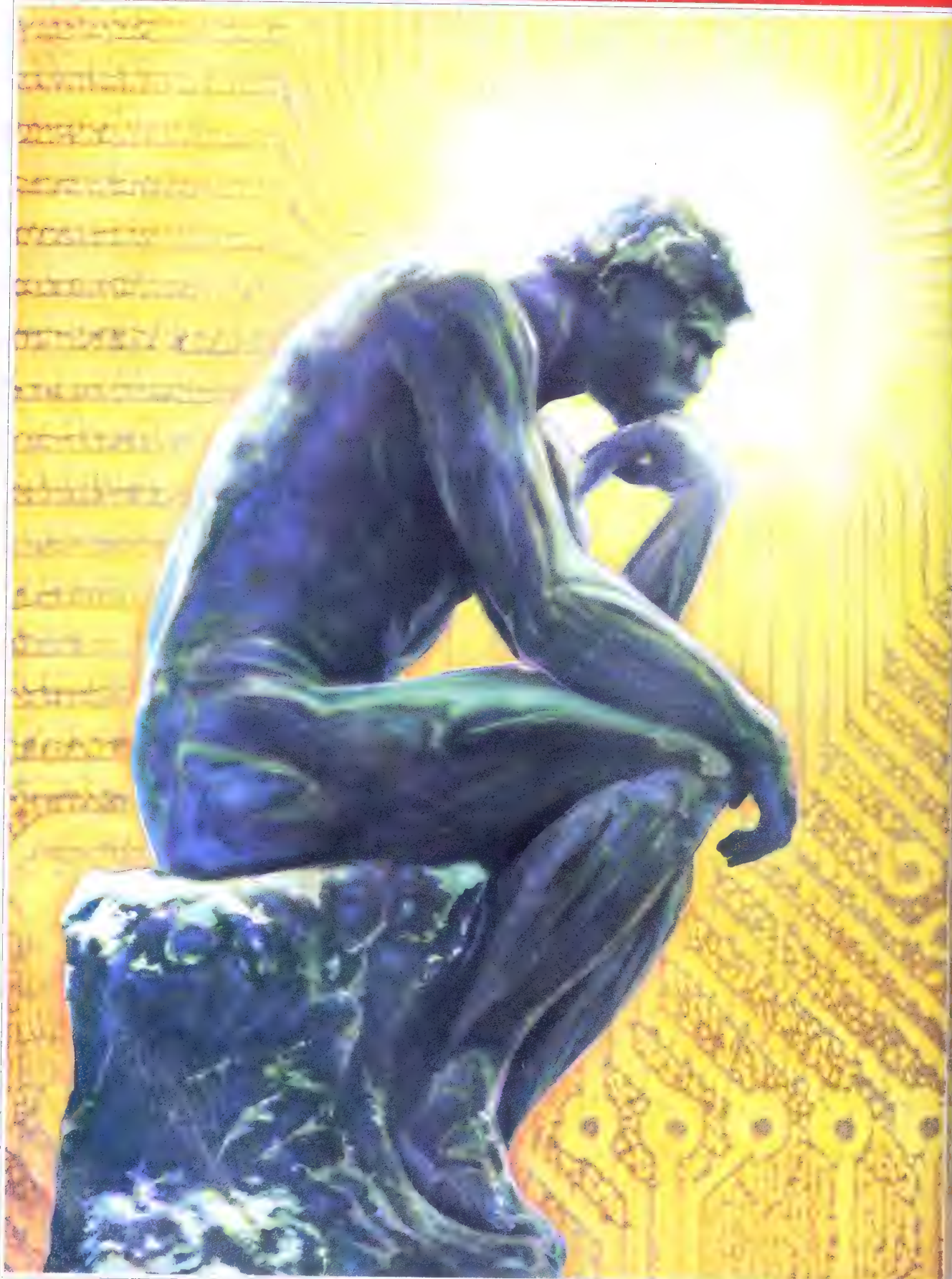
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SMART PROGRAMS GO TO WORK

W APPLIED-INTELLIGENCE SOFTWARE MAKES DECISIONS FOR THE REAL WORLD

When Sharon, 35, entered St. Joseph Mercy Hospital in Ypsilanti, Mich., late last year, doctors knew her case was severe. She was diagnosed with a potentially fatal respiratory disease, on top of her existing lymphoma, and was rushed to the intensive-care unit. Off in a corner, near an linen closet, sat a workstation promised to do what all the other high-medical gear could not: predict whether Sharon would live or die.

Doctors and nurses fed data on Sharon's condition and medical history into a computer, which was running a program called Apache. Based on its data and a review of records from 18 previous intensive-care patients and Sharon's vital signs, the program first predicted that Sharon had a 15% chance of surviving. But two weeks later, the figure had risen to 90%. The doctors prepared themselves for hard decisions on whether to continue treatment. Then, overnight—almost magically—the picture changed. As it sorted through the conflicting readings on Sharon's diverse symptoms, the program detected signs of hope that the doctors had not seen. It calculated her chance of dying had dropped to 10%. Twelve days later, it was 40%, which meant she could be moved to a regular ward. Sharon is now recovering at home.

Without Apache III, says Dr. Charles M. Watts, the unit's director, the staff would not have noticed and responded to the improvement for another four days. With it, he says, his staff acts more quickly and is better able to control costs by focusing attention on cases most likely to benefit.

Until recently, doctors never would have relied so heavily on software that presumes to rate a patient's fate. Could it be that machines that "think" have finally arrived? Has the long ballyhooed

technology called artificial intelligence been perfected?

Hardly. While it remains a goal of researchers around the world, the 35-year-old quest for machines that mimic human thought has produced so much hype, so many dashed expectations, and even outright bankruptcies that software makers now shun the term. "This is not artificial intelligence," insists Gary Bisbee, chief executive officer of Apache Medical Systems Inc., the Washington startup that has sold its package to St. Joseph Mercy and 16 other hospitals.

NO THINKING. So what is it? Call it applied intelligence—software that "knows," rather than software that "thinks." Applied intelligence occupies a happy middle ground between the largely theoretical world of machines that think and today's conventional computer programs, which remain dumb, if powerful, tools. Most programs don't "know" anything. All they can do is carry out the tasks that a human operator tells them to perform.

Applied-intelligence software, on the other hand, knows enough to make some decisions itself—because it embodies a wealth of human experience. In addition to advising doctors, such programs are being used to predict stock performance, detect tax and credit-card fraud, and pinpoint underground oil and gas deposits (table). "The fo-

LET YOUR SOFTWARE DO THE THINKING

The following industries rely on applied intelligence software to help make decisions previously left entirely to humans. Among the most common approaches: neural networks, which recognize patterns, and expert systems, which simulate the knowhow of human experts

ENERGY



Arco and Texaco use neural networks to help pinpoint oil and gas deposits deep below the earth's surface

FINANCE



Shearson Lehman uses neural networks to predict the performance of stocks and bonds

GOVERNMENT



The Internal Revenue Service is testing software designed to read tax returns and spot fraud

HUMAN SERVICES



Merced County in California has an expert system that decides if applicants should receive welfare benefits

MARKETING



Spiegel uses neural networks to determine who on a vast mailing list are the most likely buyers of its products

TELECOMMUNICATIONS



NYNEX has a system that helps unskilled workers diagnose customer phone problems

TRANSPORTATION



American Airlines has an expert system that schedules the routine maintenance of its airplanes

cus now is using computers to capture human experience and make well-defined, specific decisions," says Lynden Tennison, director of knowledge systems at American Airlines Inc.

The opportunity is huge. In industry and government, most everything that gets done requires a big chunk of human knowhow. According to Joe K. Carter, a partner with Andersen Consulting Inc., the knowledge of how manufactured goods are built and how they work makes up 70% of their development costs. And in service businesses, such as selling mutual funds, that percentage is about 90%. Yet, Carter asserts, "knowledge is the most underused asset in any organization." If you can somehow transfer knowledge from human brains into computer programs, however, you can leverage that asset to the hilt.

At American Airlines, the pursuit of applied intelligence led a team of three "knowledge engineers" to spend about a year at the airline's Tulsa maintenance center studying reports, interviewing

mechanics, and learning everything about how routine aircraft maintenance is scheduled and performed. They studied all the tricks that American's maintenance managers had devised—such as building in extra time for a plane coming through Phoenix, because the high proportion of elderly people there means it takes longer to empty and reload the aircraft.

Everything the knowledge engineers learned in Tulsa was then funneled into a computer program called Moca, which runs on Apple Macintosh computers. A so-called expert system, the program represents the combined knowledge of 30 aircraft-routing experts. That know-how has been translated into 5,000 rules that the program refers to when deciding how best to schedule routine maintenance for all of American's 622 planes. Under Federal Aviation Administration regulations, each must stop over at a regional maintenance center at least once every 60 hours of flying time. The trick is to do that without disrupting the

airline schedule. Above all, carriers want to avoid the cost of flying empty planes to maintenance centers. With Moca managing all the details, American saves an estimated \$500,000 annually by Moca does a better job of all that humans alone ever could.

MAGIC MARKER. The same type of system is used by a county government in central California to improve the delivery of social services and cut costs. The Human Services Agency of Merced County has a computer program called Magic, which consults a matrix of government regulations to determine 72 hours—vs. as long as three months if an applicant qualifies for benefits—then calculates how much and what of benefits will be given, a task previously used to require clerks with six months of training on policies relating to welfare, fare, food stamps, medicaid, and child care. Now, all that can be done by computers who don't know much more about how to lead applicants through a maze of questions posed by the computer.

SURE, IT CAN DRIVE, BUT HOW IS IT AT CHANGING TIRES?

If you spot a vehicle without a driver cruising down a Pittsburgh-area road, it's probably not a Hollywood stunt for a remake of *The Invisible Man*. Chances are, it's Alvin, the prototype of a self-driving car created by a band of graduate students and professors at Carnegie Mellon University.

Alvin (Autonomous Land Vehicle In a Neural Network) is one of the most promising demonstrations of the powers of neural network technology—computer programming that simulates how neurons in the human nervous system relay millions of bits of data to the brain for processing. In Alvin's case, incoming video signals are fed to a network of computers that constantly matches them against the thousands of video images it already has learned, such as trees, parked cars, and pavement.

SNOOPING JEEP. A self-driving vehicle has been high on the agenda at the Defense Advanced Research Projects Agency (DARPA) for nearly a decade. Scientists there envision the day when a driverless jeep

could scout danger zones, detect land mines, and snoop around behind enemy lines without endangering the lives of soldiers. But writing computer programs that mimic all the coordinated decisions that a human driver unconsciously makes has proved to be harder than first

imagined. After seven years and \$10 million in research expenses, Motorola Corp. produced a prototype vehicle that could drive along at about 10 mph and stay on the road for more than one or two.

The Carnegie Mellon team, led by research scientist Dean A. Pomeroy, began working on a neural-network approach the time DARPA launched a million, three-year push into computer circuits in late 1987.

Alvin went to several projects, including one at Westinghouse Electric Corp. (table) as well as Alvin. CMU researchers have spent \$10 million, provided

Equipment from the National Science Foundation and DARPA.

Neural networks are also a big subject in the world where the International Technology Industry Consortium is to kick off a World Conference on Project on Project on Project. With as much

billions in funding over 10 years, the aim is to explore a range of technologies such as neural networks capable of "flexible" thinking, which is patterned on the human thought processes of

Back in the U.S., a Stanford University professor and his

Video cameras programmed to 'recognize' shapes such as trees and other cars

Inside is a network of four workstations that process video data from all the cameras and vote on how and whether to turn, brake, etc.

DATA: CARNEGIE MELLON UNIVERSITY

Row of cameras programmed to perceive colors, like the black pavement and the yellow divider line

Small motors turn the steering wheel, work the brakes, accelerator, and gearshift



LOOK MA, NO HANDS

e Magic system, devel-
with Andersen Consult-
saves the county \$4 million
year in administrative and
ing costs, says John B.
n, director of the agency.
that's not all. "The ma-
e doesn't discriminate
nst anyone," he says.
s, people are not penalized
ey get a clerk who lacks
proper information." Be-
e a welfare clerk's job has
simplified, the agency has
to reduce its staff by
and will still be able to
e the same 40,000-client cad.
d. An audit by Ernst &
ng concluded that if such a
em were adopted state-
California could save
million a year.

it expert systems have their draw-
s. They work best in cases such as
Merced County social-services de-
nent, with its clear-cut set of rules,
American, where there's a precise
of experience from which to create

d Greg Kovacs is working on
calls a nerve chip. It's a micro-
thousands of tiny holes that
theory, reconnect damaged
ernard Widrow, a Stanford pro-
electrical engineering, suggests
uld one day help restore feeling
d that was severed in an acci-
idea, he says, is to feed the
dings from the hand to the arm
the chip's tiny holes. "The neu-
ould learn how to remap the
s," says Widrow. In tests on a
some nerve functions
tored, he says.

NETY. Alvin is much
proving the practical-
aral-net applications—
robots that "see." Al-
ns to drive by watch-
man do it for about
ites. Once its cameras
ow a person drives
wo-lane highway or a
, it never has to learn
ticular road pattern
Currently, it knows
dozen different road
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rs—Sun Microsystems
kstations named Moe,
urly, and Shemp—pro-
data from video. Their
ming tells them how
to each type of object,
for a pedestrian, say.
t summer, the first Al-
modified Chevy van,
ising suburban Pitts-
pausing at stop signs,



them. But they don't work well when
the problem is too complex or simply
can't be boiled down into a number of
rules. That's where a newer applied-in-
telligence technique called case-based
reasoning, which draws inferences from
thousands of actual experiences, comes

swerving to avoid dogs, and otherwise
doing a good job of pretending to be
human. By last fall, when the system
was transplanted to an Army ambulance,
it set an autonomous-land-vehicle speed
record of more than 55 mph while cover-
ing a distance of 21 miles. (During such
tests, a human usually sits behind the
wheel, as an emergency backup.)

But Alvin still has some glitches, ad-
mits Charles E. Thorpe, the CMU profes-
sor who manages the project. On high-
ways, it has a tendency to exit at every

phone company for New York and New
England, uses the technique to assess
whether a repair truck really needs to be
dispatched when a customer reports a
problem. Clerks with no expertise in
phone repair consult the Maintenance
Administration Expert, or Max, pro-

off-ramp: It positions itself in the right-
hand lane by tracking the edge of the
roadway, but it can't always distinguish
between an ordinary curve and an off-
ramp. Also, when it snows, the video
cameras that specialize in perceiving col-
ors lose the ability to see the black road
and the yellow divider lines. "It has some
of the same troubles that humans experi-
ence in a whiteout," he says.

So who needs a self-driving car? May-
be nobody but the Pentagon. Still, Po-
merleau foresees commercial applica-
tions, including a sort of robo-
mailman. Using a robotic arm
and computerized mapping
software, a self-driving van
would travel up and down
streets, tossing newspapers
and mail packets on front
lawns. If the vehicle came up
against an obstacle it didn't
recognize, it could brake, call a
human dispatcher, and get spe-
cific instructions.

The system could also be
miniaturized and packaged
with conventional cars—as the
ultimate form of cruise control,
Pomerleau predicts. He's
afraid, however, that high
product liability insurance
would prevent such a product
from hitting the market. "We
don't think we'll ever perfect
it," he says. "People aren't
100% reliable in their driving—
so how could this be?"

*By Otis Port in New York,
with bureau reports*

THE EXOTIC WORLD OF NEURAL RESEARCH

*These projects are on the frontier of neural networks, in which a com-
puter "recognizes" patterns such as the shapes of objects*

AUTOMATIC AUTO Carnegie Mellon is developing an "autonomous
land vehicle" called Alvin that can cruise around town using video
camera "eyes" instead of a human driver (photo)

NERVE MENDING At Stanford University, researchers are testing a
computer chip that can help compensate for damaged human
nerves. If your hand were severed and reattached, the nerves from
your arm could relay signals through the chip to your hand

JAPANESE FUTURISM MITI's Real World Computing Project, sequel
to the disappointing Fifth Generation artificial intelligence project,
kicks off in April with as much as \$1 billion in funding. The 10-year
goal: An intuitive learning machine

MACHINE VISION Westinghouse is using neural networks to recog-
nize the image of a tank and make a friend-or-foe decision by
matching the image against those of different tanks in its memory

LANGUAGE TRANSLATOR The National Security Agency is creating
a program called Tipster that would read stacks of Japanese docu-
ments, translate them into English, and, based on content, electroni-
cally forward each one to the right person

DATA BW

**AMERICAN AIRLINES' MOCA
SYSTEM EMBODIES THE
KNOWLEDGE OF 30 EXPERTS**

in. The Apache program that
helped Sharon is an example.
It searched a vast store of real-
world knowledge that a single
doctor couldn't possibly have
(table, page 100). Dr. Watts of
St. Joseph Mercy Hospital says
95% of Apache's predictions of
mortality rates prove accurate
within 3%. And while a doctor's
prognosis can vary according
to how hurried, tired, or well
trained he is, Apache never
wavers.

More mundane jobs can be
tackled by case-based reason-
ing, too. NYNEX Corp., the
phone company for New York and New
England, uses the technique to assess
whether a repair truck really needs to be
dispatched when a customer reports a
problem. Clerks with no expertise in
phone repair consult the Maintenance
Administration Expert, or Max, pro-

gram, which searches thousands of repair records to find one like the caller's problem. NYNEX says Max improves customer service and saves an estimated \$6 million per year—by reducing unnecessary service calls and cutting the size and training needs of the screening staff.

Not everybody is welcoming the advent of such systems. Labor advocates contend that systems such as Max, Magic, and Moca tend to "deskill" the work force. "The employee doesn't have to know anything beyond what's on the computer screen," says Barbara Garson, author of the 1988 book *The Electronic*

from 35% to 15%, mainly because employees used to find the job "too complicated to learn," he says.

An even more advanced form of intelligent software, called neural networks, is taking on jobs that no human ever did. Neural nets, whose name is derived from the study of how the human nervous system works, use statistical analysis to recognize patterns among vast amounts of information. The technology, which could be the key to computers that "see" and "hear," is one of the most fertile grounds for artificial-intelligence research (page 98). But it's also finding its way into business. Shearson

huge list of people who had made one catalog purchase and mixing realms of lifestyle and demographic data for each addressee, such as age, income, family makeup, and home ownership. NeuralWare's software went to work, found, for example, that a young suburban couple, housebound with a baby, is five times more likely to order regularly from a catalog than a similar couple without kids.

By spotting thousands of these trends, NeuralWare programmers came up with a way to discard 60% of the customers who probably wouldn't purchase again, while retaining 90% of those who would.

Oschmann expects big payoffs: Savings of at least \$1 million annually by avoiding unlikely buyers and increasing catalog sales, overall.

BIG PLAYERS. Neural-network technology is also making possible a whole new breed of easy-to-use PCs. So-called "top PCs," which "read" letters, words and numbers traced on their screens, rely on neural-network programming to recognize the difference between an "e" and an "o." For its new personal computer, for example, Poquet Computers uses NestorWriter, a neural-network program from Nestor Inc. The software can also "learn" any individual's handwriting.

Slowly but surely, applied-intelligence software is beginning to spread throughout computerized business. Last year, several dozen U.S. computer and software companies spent about \$200 million in expert systems, case-based reasoning, and neural-network packages, according to International Data Corp. That's up 100% from 1988. And those figures do not include hundreds of millions of dollars in related consulting and custom programming services—as much as \$15 million a project—billed by companies such as Andersen Consulting. Andersen installed two-dozen applied intelligence systems last year.

One of the biggest players so far has been Digital Equipment Corp. Two years ago, it built the world's first large-scale expert system, a program with 18,000 rules on how to fulfill customers of its VAX minicomputers. Since then, DEC has installed 70 other applied intelligence systems, which the company says save it \$200 million a year. Andersen has implemented 50 projects, making bringing in millions in fees, for customers ranging from Aetna Life & Casualty Co. to Japan's Sumitomo Bank.

Now, Unisys Corp. is developing an applied-intelligence system for the Pe

WEIGHING THE CHANCES OF LIFE AND DEATH

Software from Apache Medical Systems is used to rate an intensive-care patient's chances of survival, helping medical personnel decide how to set priorities and allocate resources. Using a technique called case-based reasoning, the program determines which past cases most closely resemble the one at hand. Because no past case is likely to exactly match the current case, the computer uses inference to calculate a patient's prognosis. Here's a step-by-step rundown:

STEP 1 Doctors and technicians collect 27 pieces of data on the patient, including the initial diagnosis, the patient's vital signs, level of consciousness, and whether the patient has AIDS or other chronic diseases

STEP 2 The Apache program compares each patient's data against records of 17,448 patients who were treated at 40 U.S. hospitals in 1989. By "learning" from these past cases, the program can rate the current patient's chance of survival

STEP 3 The computer returns one number, from 0 to 100, for each patient. The higher the number, the greater the chance of that patient dying in the hospital. Studies have shown the program to predict more accurately and more optimistically than top-notch doctors

DATA BW

Sweatshop, which details the social consequences of computerization. Garson argues that applied-intelligence software is already deskilling workers ranging from technicians to stockbrokers.

HIGHER MORALE? That's "the classic fear," says American Airlines' Tonnison. But, he argues, intelligent software can actually enhance many jobs by freeing workers to use their brainpower on higher-level problem solving. "Now, our employees are free to concentrate on really unique problems," such as emergency repairs, he says. Merced County's Cullen says his workers are happy to skip the mechanics of assessing eligibility and devote more time to helping clients. One sign of improved morale: Since Magic arrived last year, turnover has gone

Lehman Brothers Inc., for instance, uses neural nets to comb through mountains of data and recognize patterns in market activity. Flagging patterns before they're apparent to a human can mean millions in trading profits.

Spiegel Inc., the Oak Brook (Ill.) merchandiser, uses neural nets to fine-tune its direct-mail operation. The company mails 200 million catalogs and brochures to customers each year. "If we could separate onetime buyers from those who are most likely to purchase again," the company really could boost profits, says Phillip Oschmann, Spiegel's director of market research.

That challenge was taken on by NeuralWare Inc., a Pittsburgh maker of neural-network software. Starting with a

The *Business Week* Roundtable of European Chief Executives
presented in association with

THE INTERNATIONAL CHAMBER OF COMMERCE

EUROPEAN BUSINESS IN TRANSFORMATION

BARBARA H. PETERS
AND JAMES PETERS

By any standard, Europe today is a great work in progress. Sweeping change is underway in and around the Continent. On one hand are historic movements to unify and integrate and, on the other, nationalistic efforts to centralize and fracture. In the face of all these transformations, Jacques Attali, president of the European Bank for Reconstruction and Development, says, "We are entering a realm of the unknown, facing change of unprecedented magnitude. That is extraordinary in that we have a chance to get it right."

Attali delivered his hopeful forecast at the 1991 *Business Week* Roundtable of European Chief Executives held recently in Vienna, Austria. He cautioned the assembly of business leaders from Europe's major corporations that "the biggest challenge of all is the transition itself." Austria's minister of State, Peter Jankowitsch, extended the challenge this way: "It is time to prove that we can manage the new uncertainty. It is time to create a new European architecture." Not surprisingly, that challenge resonates profoundly for chief executives of companies across Europe.



A continental corporate transformation is underway.

CORPORATE LEADERSHIP IN CHANGING TIMES

European executives see uncommon opportunities—as well as risks—in the new internal and external realities. They agree, for example, that a long-term perspective is needed to appreciate the potential of the New Europe. But they know, too, that tomorrow's winners will likely be those who boldly seize the lead today.

John P. Clancey, president and CEO of Sea-Land Service, Inc., says that increasingly globalized markets and leaner times are reinforcing the leadership lessons his company has learned in Europe and elsewhere over the last decade. "To manage in a fast-shifting environment, we have discovered we must be flexible and lead employees in an open, personal manner." Sea-Land introduced a worldwide quality process that not only articulates these goals but also supports them by providing "a common language for all our people, allowing us to work together closely to anticipate and satisfy tomorrow's tougher customer requirements."

"Empowerment makes our quality program work," Clancey continued, "because employees themselves become the process. In turn,

EUROPEAN BUSINESS IN TRANSFORMATION

the process yields continuous improvement and builds enthusiasm across the organization. By listening to employees and customers, by creating a structure where fair decisions are made fast, by communicating, defending, and then living the company's core values, Sea-Land encourages employees to work with us, not for us. Genuine teamwork," Clancey concluded.

More rapid delivery of products and services is another requisite in today's zero lag-time world. John M. Thompson, chairman of CSC Europe,

inevitably undermining the goal of a cooperative, learning, high-trust culture—the goal Austrian Industries has chosen as the company abandons the old bureaucratic, hierarchical paradigm."

A NEW EUROMANAGER?

With the growing prospect of a pan-European market, can a new-style Euromanager be far behind? Jean-Charles Rouher, Secretary-General of the International Chamber of Commerce, suggests the business community "may develop various local breeds of a universal species, the international executive."

Rouher notes that the future Euromanager will face unique circumstances: not only the unified market—and the likelihood of a greater European Economic Area joining the 12 EC and 7 EFTA countries—but also continuing

realignment of Eastern Europe and the former Soviet republics. "Clearly, what we must seek in Euromanagers are culturally flexible, linguistically diverse men and women who are distinctly global in their market vision," said Rouher.

At Volkswagen AG, they don't talk about a Euromanager. "We speak only of the one-world manager," said board member Dr. Martin Posth. "This is a manager who can work in an international network, who can cope with cross-cultural issues in every country in the world, who can generate global synergetic results, and who is at home in every market." In short: a manager who can think globally and act locally.

BUILDING CORPORATE COMPETITIVENESS
The European Community's big shift is only months away, and companies

"International business is now skewed toward the world's largest firms... companies with revenues over \$1-billion account for ... 80% of world sales produced overseas."

*Jacques Manardo, Chairman,
European Board, DRT International*



insists that speed, coupled with nimbleness, will distinguish tomorrow's benchmark companies. "You need speed to reduce the time from product concept to product rollout, from customer order to customer delivery." And Thompson sees "transnational networks" of people and electronics as the best solution to this strategic imperative.

Dr. Hugo Michael Sekyra, chairman of the board of Austrian Industries, also acknowledged the value of speed for speed's sake. His giant group of state-owned companies, now in the midst of privatization, has sold over 70 firms since 1986. "In streamlining an organization," Dr. Sekyra says, "leaders must provide swift, decisive responses to all forms of change—that is, change emanating from both inside and outside the company. Otherwise, communication and confidence will be diminished,



FOREIGN COMPETITION ON EUROPEAN TURF

A PAN-EUROPEAN MARKET PRESENTS enormous opportunities. With a projected potential market of 450 million people by the year 2000 and 40% of the world's GNP, the smart foreign competitor has already planted its stake in European soil. Foreign investment in the EC totaled \$73 billion in 1990 alone. As of March 1991, the Japanese had cumulatively invested \$42 billion in the EC, while US investments had topped \$164 billion.

Vittorio Cassoni, group managing director of the Olivetti Group, points out that "Companies from the US and Japan are targeting Europe now because of our unified market. The relaxation of regulations is making market penetration far easier here than in their home markets.

"Corporate health depends in large measure on the relationship that a company has with its national industrial system," Cassoni insists. "Olivetti is an Italian company. We know what it means to be Italian, and we have close relationships with Italy's social, economic, and political

EUROPEAN BUSINESS IN TRANSFORMATION

systems. But the question today is, what does it mean to be European? Will Olivetti's association with Europe be the same as its association with Italy?

"For Olivetti, Europe is already our domestic market. So we want a relationship with Europe that corresponds to IBM's relationship with the US."

Even while EC rules are still being written, Eberhard von Koerber, executive vice president of ABB Ltd. and chairman of the managing board of Brown Boveri AG Germany, urged executives to look beyond the idea of just winning at home in Europe. "The globe is today's playing field. European industry must expand worldwide—or lose."

Von Koerber advises European companies to strengthen their competitive positions by implementing proactive measures such as these: streamlining business operations; focusing on quality; strengthening technology; and, most important, investing in people. "International competition on European soil means people must have the opportunity to become more innovative. To be successful in the New Europe, people will have to manage intelligently, use demanding new technologies, work in interdisciplinary groups, and make fewer errors," he concluded.

Reminding the chief executives that "Europe is more than 12 countries," Dr. Guido Schmidt-Chiari, chairman of the managing board, Creditanstalt-Bankverein AG, expressed his hope that there will soon be an agreement on the creation of a European Economic Area. "That certainly would be an important step toward strengthening the competitive position of European companies worldwide." ■

have been positioning themselves to compete better in the unified market. "International business is now skewed toward the world's largest firms," said Jacques Manardo, chairman of the European board of DRT International. Data compiled by DRT reveals that "companies with revenues over \$1 billion account for 40% of world sales and 80% of world sales produced overseas. Furthermore, companies with revenues over \$10 billion account for 20% of world sales and 60% of world sales produced overseas."

These statistics deliver a clear message: Manardo reports that companies of every nation and industry are now looking at mergers, acquisitions, and alliances as ways to lever their competitiveness, both for the unified market and the world beyond Europe.

At the same time, though, the hyper-M&A activity of the 1980s has tapered dramatically. John Connolly, DRT's London managing partner, attributes this sharp falloff to the recessionary climate in the US and the UK.

"Moreover, at the strategic level," Connolly adds, "analyses show that fewer than 50% of M&As result in value creation for shareholders. And there is widespread skepticism about many of the highly leveraged transactions of the 1980s."

Looking ahead, Connolly expects a recovery in M&A activity, a recovery driven largely by the new regulatory environment. "The EC is helping to reshape European industry so that we have companies robust enough to win in the global marketplace," he concludes. Sharing that prognosis is Emmanuel Rodocanachi, senior managing director of Banque Hottinguer. "The M&A cli-

mate in the 1990s will also be softer," he predicted. "Mergers will reflect agreement and alliance between firms—in marked contrast to the hostile takeovers of the last decade."

BEYOND THE EC: LOOKING EAST AND WEST

The movement of Central and Eastern European countries to a market economy presents unparalleled challenges to companies exploring investment and growth opportunities in the region. With no blueprints to follow, business leaders have to carefully weigh the promises and realities of doing business east of the EC. The signs are more than promising: Poland, Czechoslovakia, and Hungary have already taken great leaps into the world of free markets—including vast privatizations.

Thomas J. Bata, chairman of the Bata Shoe Organization, was one of the first entrepreneurs from the West to participate in a joint privatization venture in the East. Bata admits personal



"Companies from the US and Japan are targeting Europe... relaxation of our regulations is making market penetration far easier here than in their home markets."

Vittorio Cassoni, Group Managing Director, Olivetti Group

motives, in part, "spurred my pioneering project." A native of Czechoslovakia, Bata fled his homeland in 1939, abandoning a prosperous shoe business founded by his father.

In March 1992, after more than two years of negotiations and planning—and a \$10 million investment—Bata will own 70% of his family's former shop and plants in Czechoslovakia.

EUROPEAN BUSINESS IN TRANSFORMATION

Calling it "a purchase, not restitution," Bata listed some major obstacles that slowed his progress in reopening the business: "There was no legislation for opening private shops, my former properties were crumbling, and the plant equipment dated from the 1920s."

Other entrepreneurs will face similarly daunting challenges in Central and Eastern Europe. "As these countries move ahead bravely with economic and democratic reforms, the need for the international business community to follow in Bata's footsteps is clear," says Gerhard Randa, deputy chief executive officer of Bank Austria. "We must help integrate these countries into the world economy. Of course, there are high risks involved in extending fresh money and new credits. But the risks of not acting are grave. We are investing in our common future."

Business expansion to the United States is another option for Europeans. It makes sense that companies seeking to shore up their position look west to the US, the world's biggest market. "We see the US as a gold mine," says Daniel Piette, group executive vice president of LVMH Moët Hennessy Louis Vuitton and chairman of Christian Dior, Inc. "America is easy to love. That is a real danger because the reality is that few European companies make money there."

Investing in the US requires a long-term commitment, and companies that succeed are those that underwrite research and undertake careful preparations. "It takes a foreign company at least five years to get established," warns Piette. "Remember, the US is a collection of 50 states, each with different laws and regulations. From a marketing position, business needs to go state by state. And then, you must deliver exactly what you promise."

CORPORATE CITIZENSHIP

Helmut Maucher, chairman and CEO of Nestlé S.A., and one of Europe's eminent corporate citizens, notes the growing interconnection between what com-

panies do—or don't do—and the well-being of society at large. "And we must take into account as well that external events, changes, and trends have a far greater influence on business decision-making today than ever before."

Nowhere is that seen more explicitly than in the case of environmental issues. Torvild Aakvaag, former president and CEO of Norsk Hydro A.S., said, "We in industry face a formidable task because we *can* develop the technology the world needs to halt environmental deterioration; we *do* have the solutions." Aakvaag encourages industry to tell its story: "We are often deemed irresponsible. But, in fact, many companies have been developing and deploying environmentally sound innovations for some time."

One example was provided by Helmut Sihler, president and CEO of Henkel KGaA. His company invented an ecologically viable substitute for the phosphates in detergents. "We reduced the flow of phosphates into Germany's environment from 250,000 tons to 1,000 tons," Sihler said. And there is another payoff: "The substitute significantly improved our market share."

Shell UK is a leader of current British business efforts to ally with government in setting environmental standards for all industries. John Collins, chairman and chief executive of Shell UK, says, "Ideally, the standards should be global, but the very least we should aim for is European standards." Collins stresses that business leaders "must produce action plans to lift standards, and measure performance as a spur to delivering those plans."

Silvia Pariente-David, managing director, DRI/McGraw-Hill, spoke for

many delegates at the Vienna Roundtable when she concluded, "It isn't enough to comply on the environment today. Business must lead."

INTO THE FUTURE

While speaking of Czechoslovakia's readiness to renew itself economically and politically, Václav Klaus, Minister



"To manage in a fast-shifting environment... we must be flexible, lead employees in an open, personal manner... listen to employees and customers."

John P. Clancey, President and CEO of Sea-Land Service, Inc.

of Finance of the Czech and Slovak Federal Republic, cited these four universally applicable preconditions for transformation: "You must have a galvanizing vision; you must have a flexible, pragmatic strategy; you must create social and political consensus; and, finally, you must begin."

Klaus' prescription for national renewal could as easily be a classic recipe for corporate transformation. And surely the injunction *to begin* is the telling ingredient. It is the point when business leadership moves beyond the crafting of the vision and the strategy and begins to live the values and deliver the results. It is the beginning of the future. ■

Barbara H. Peters and James Peters are New York-based business writers who specialize in corporate communications.

Business Week is grateful to the International Chamber of Commerce for its important role in developing the Roundtable of European Chief Executives

Indiana Public Welfare Dept. similar to forced County's. And surviving artificial-intelligence software startups are turning to applied intelligence, too. Palo Alto (Calif.)-based Neuron Data Inc. is the leading supplier of expert systems for personal computers. And Inference Corp. of El Segundo, Calif., supplied knowledge software and consulting services to American Airlines' Moca system and the NYNEX Max project. The next thing in applied intelligence,

the experts say, is finding ways to use many different programming techniques at once. Some problems may not be solvable by a neural network, expert system, or case-based reasoning program, but might be tackled by a combination.

But even those leading the applied-intelligence charge are leery of overselling it and repeating the mistakes of the past. The notion of "artificial intelligence was extremely grandiose," says Robert Hecht-Nielsen, chairman of HNC Inc., a

maker of neural-network software in San Diego. This time around, the emphasis is on achieving reasonable goals—tackling real-world applications, not making science fiction come to life. Sounds like an intelligent approach.

By Evan I. Schwartz in New York, with James B. Treece in Ypsilanti, Mich., and bureau reports

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THE FATHER OF AI SAYS HIS CHILD HAS GONE ASTRAY

Marvin L. Minsky, one of the patriarchs of artificial intelligence, is in a feisty mood. The man who co-organized the 1956 conference that launched the quest for artificial intelligence and set off a search for the holy grail of "thinking" computers now sits on a couch in his Brookline (Mass.) living room and chases those who would reduce his grand vision to a series of equations that solve a simple problem.

The idea of software that replicates human thinking still burns brightly in Minsky's brain. But progress toward his goal has slowed, he says, because AI "was taken over by people who tried to make it too formal and mathematical about it."

Minsky, 64, has been frustrated about the course of artificial intelligence for years. At Massachusetts Institute of Technology's Artificial Intelligence Laboratory, which he co-founded with fellow AI patriarch John McCarthy in 1958, Minsky worked to understand how humans learn. The laboratory came up with Lisp, for list processing, the first programming language in the field. But a series of startups that tried to commercialize it eventually failed because the language was too cumbersome.

In 1969, alarmed at the tilt by other researchers to neural-network technology, Minsky co-authored a book called *Perceptrons*, debunking the idea that software could actually simulate the function of human neurons. His influence was still so great that almost overnight, funding for neural-network projects dried up—an outcome Minsky says he never intended.

CHILD'S PLAY. Neural networks aren't his only pet peeve. Minsky has been speaking out against just the type of relatively simple systems that fall un-

der the heading of applied intelligence. "We have lots of expert systems that do specialized things, but there isn't any machine that understands the things a 6-year-old knows," Minsky says. For instance, most of today's intelligent software doesn't know what any child does—that you can pull a string but can't push one, for instance.

In answer to a narrowing concept of intelligent software, Minsky in 1986

In the past, graduate students flocked to the AI pioneer, elaborating on and trying to implement his ideas. Two examples are Danny Hillis, founder of Thinking Machines Corp., a maker of supercomputers, and Raymond Kurzweil, founder of three AI companies, including speech-recognition software maker Kurzweil Applied Intelligence Inc. Kurzweil began corresponding with Minsky in the 1960s, when he was a Queens (N.Y.) high school student. Now, he thinks of *The Society of Mind* as just a "philosophical poem."

TINKER TOYS. Meanwhile, the AI research community has taken up neural networks and other ideas Minsky opposed. Yet Minsky retains his childlike exuberance. Besides a mess of papers, his living room is crowded with two pianos and dozens of odd gadgets, such as lamps that are turned on by the sound of clapping but keep flickering off, inexplicably. Roger C. Schank, a Northwestern University AI researcher, makes fun of his long-time associate's gadgets. "Once [those lamps] are fixed," Schank says, "there's no possibility he would ever use them."

That's perhaps the main criticism of Minsky: He's far more interested in the ideas and theories of technologies than getting the stuff to work right. To this day, he has never been very specific about how his *Society of Mind* theory might work. Says William R. Swartout, a director at the University of Southern California's Information Sciences Institute: "Marvin feels [his latest theory] is very specific, but in areas, it is still a little vague." On the other hand, it's often grand but vague ideas that lead—eventually—to real breakthroughs.

By Gary McWilliams in Brookline, Mass.



MINSKY: SOFTWARE CAN'T YET MIMIC GRAY MATTER

put forth an overarching theory of intelligence. Presented in his book *The Society of Mind*, his theories cover everything from how language arises to his argument that machines need not operate purely on logic to have reasoning. The core idea is that intelligence involves the interactions of a series of otherwise "dumb" programs—like the one that lets you breathe without thinking about it.

But these days there are few researchers paying any mind to Minsky.

WANTED: A NEW SET OF LAWS. WESTERN HELP WELCOME

The former Soviet states scramble for an end to legal chaos

When Russian President Boris Yeltsin issued a far-reaching decree to liberalize foreign trade last fall, he sent Western companies into a tizzy. The decree banned the sale of goods for hard currency in Russia starting in 1992, adding another layer to the rules governing joint ventures. The phones of Western and Russian lawyers began ringing off the hook. Says Alexander Minakov, a Russian lawyer whose clients include Benetton Group: "These days, there are no definite answers. We have to act like witches and predict the future."

Such uncertainty is sure to get worse. As the free market struggles to its feet in the former Soviet Union, the republics, led by Russia, are scrambling to pass laws that will support it. At the same time, Western legal experts are rushing over to grab a toehold in the two-month-old Commonwealth of Independent States by offering up their law-writing services, often free of charge. Despite the help, which is both necessary and problematic, there's no master lawmaking strategy in sight. Slapdash decrees collide with old Soviet statutes. And a persistent habit of leaving out the details makes many laws impossible to enforce. "They're a set of slogans," says Russian economist Abel Aganbegyan, "when what we need are dry, lucid laws."

The legal void worsens the risky investment climate. Westerners have been hankering for a nice, dull law spelling out their ownership rights. "They want a clear definition of property rights," says Alexander Papachristou, an attorney with the Moscow office of White & Case, a New York-based law firm.

DEARTH OF JUDGES. The legal problems are hardly news in the Commonwealth, where legislators were once picked for their willingness to rubber-stamp the Politburo's rules. Few parliamentarians are lawyers. Indeed, lawyers are thin on the ground. Moscow has just 1,500 practicing attorneys, compared with 61,000 lawyers in New York City. And after 74 years of communism, hardly anyone re-

members pre-Revolution commercial law. That includes judges, who also are in short supply. To top it off, people disregard the laws that do exist.

Some law reforms were already taking shape under *perestroika*. Then came last summer's coup and the Soviet Union's breakup, bringing an urgent need for laws at the republican level. "Right now," says Minakov, "I'd say we have only 10% to 15% of what we need."

These days, drafts and decrees are flying off the printing presses. Under

consultant on foreign investment law.

At their best, Western advisers stay in the background, commenting on drafts and suggesting model legislation. But more legal advisers are rushing in. And institutions such as the European Bank for Reconstruction & Development (EBRD) worry that the lawyers could add to the chaos by offering sporadic help or by overreaching.

Some advisers are criticized for trying to make the laws come out to their advantage. The Russian Petroleum Legislation Project is a joint venture of the University of Houston Law Center and the Russian Republic. Big Oil is financing about half of the \$1 million project to help draft Russian law on access to underground resources, including oil.

CRUDE QUEST? The project is raising eyebrows. "It could be seen like a fox just guarding, but building, the chicken house," says Irina Savelyeva, a Moscow attorney. But law center Dean Robert Knauss denies that his school is in the



Russia's proposed new criminal code, offenses such as "entrepreneurialism" have been blotted out in favor of such capitalist-type crimes as fraudulent trademarks. Meanwhile, legislators are racing to get commercial laws into place.

Despite a Russian legal tradition based on European law, the drafts show strong American influences. Commonwealth law professors speak glowingly—and knowingly—about the Sherman Antitrust Act. But there are other influences. A securities law that has just surfaced in Russia is largely the work of a joint Russian-American law-writing project founded in 1990 and headed by Milbank, Tweed, Hadley, & McCloy, a New York law firm. Another New York law firm, Cleary, Gottlieb, Steen & Hamilton, is now the Russian government's

to the oil giants. The Russian authorities, he says, asked the project "to provide legislation that would conserve energy, protect the environment, and be attractive to foreign investors."

With no time to build their own commercial law system, Commonwealth lawmakers have no choice but to rely on the West for advice. To track this Western aid, the EBRD announced a program Feb. 11 to set up electronic data bases listing Western projects and circulating drafts of laws. That should cut down on some of the legal chaos. But the hardest part may come after a new legal system has been set up. That's when lawmakers must persuade citizens, enterprises, and bureaucrats that the new set of economic laws aren't made to be broken.

By Deborah Stead in Moscow

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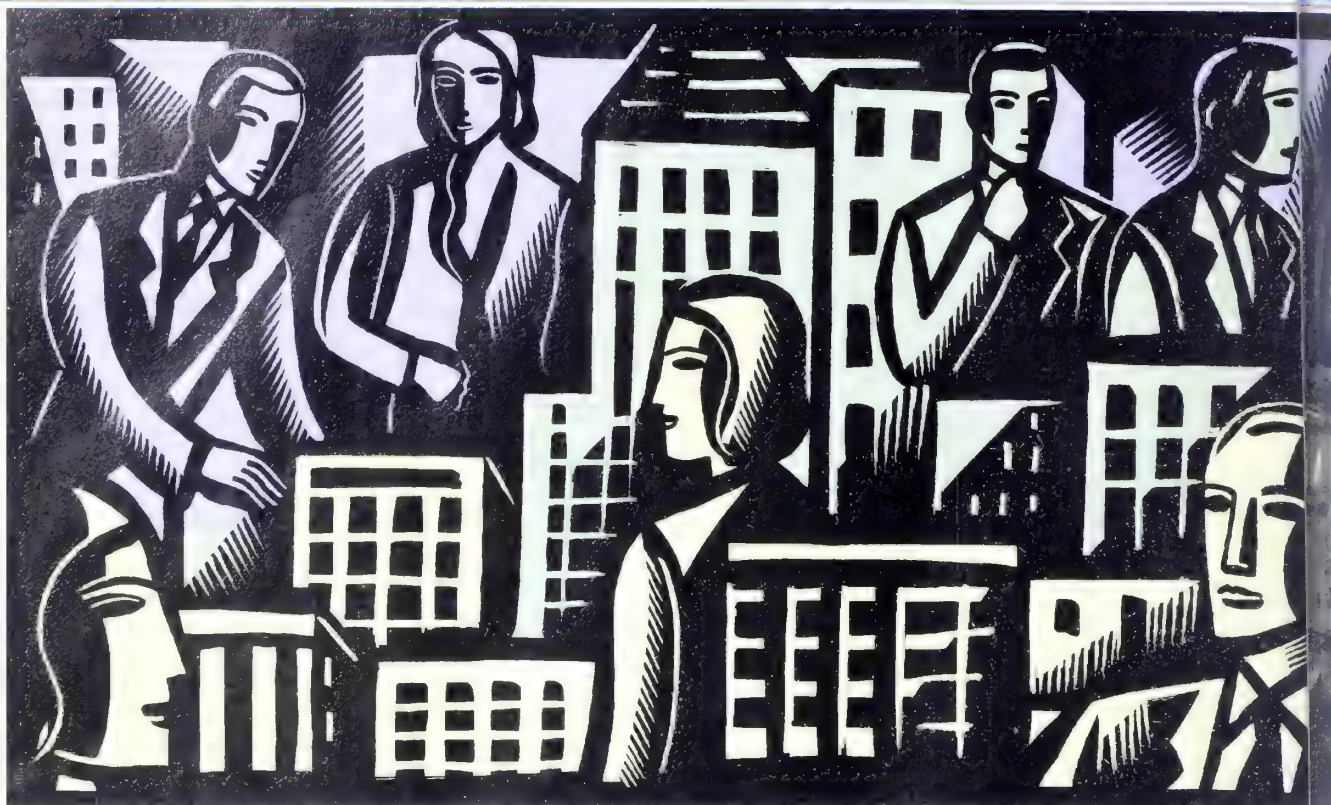
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EDITED BY AMY DUNKIN

Investing

REAL ESTATE NEEDN'T BE SCARY IF YOU FIND THE RIGHT REIT

Empty office buildings, sinking home prices—real estate is the leper of the investment world, right? Well, you can still get respectable returns on property by putting money in real estate investment trusts, REITs, which are companies that own buildings or mortgages, issue publicly traded stock. And those issues outstripped the Standard & Poor's 500-stock index in 1991 with a total return (capital appreciation plus reinvested dividends) of 35.6%, vs. the S&P 500's 30.5%.

Trouble is, REITs are a mixed bag, so you have to be careful about which one you choose. Last year was the first time REITs topped the S&P 500 since 1986 (chart). And because of the excesses

of the 1980s, real estate has some rocky times ahead.

The chief benefit of REITs is that they're highly liquid: They're traded on exchanges like any other stock. Also, they are managed by pros who aim to assemble a large portfolio of profitable holdings. Most of the nation's 200 REITs, with \$43 billion in assets, shy away from speculative ventures—a blessing in today's market. That's atonement for their high-flying ways of the mid-1970s, when many got burned. The result is that, overall, REITs should continue to do well.

Today's REITs are often superior to the other two forms of property investing—individual ownership and real estate limited partnerships. If you alone own an office build-

ing, good luck trying to unload it in this lousy market. Managing the place and getting tenants are hassles, too. The advantage of the partnerships vanished in the 1986 tax reform: You no longer get a tax break for your losses.

Chastened by the '70s, today's REITs avoid risky ventures

And since many partnerships invested in risky properties, a lot are underwater or are being snapped up by larger entities in roll-up plans that pay investors a pittance.

REITs have varying investment specialties. Thus, it pays

to know how different segments of the real estate market are faring. Some REITs focus on a specific type of property, such as warehouses or shopping centers, and some concentrate their holdings in one region. "You're wise to be careful about a REIT that has holdings all over the place," says Catherine Creswell, an analyst at Alex. Brown & Sons. "No one can know real estate outlets in Baltimore and apartments on the West Coast." Creswell says one sign of a good REIT is whether management does its own leasing and maintenance and whether its debt is less than half of asset value.

Another distinction is between so-called equity REITs, which own buildings outright and mortgage REITs, which

d property loans. "Hybrids," about 10% of all REITs, both. Equity REITs performed better in 1991 (up 7%) than the mortgage REITs (up 31.8%), whose underwriting suffered from refinancings, a problem that continues into this year. Declining interest rates tempt borrowers to pay off higher-rate loans, depriving these REITs of fat yields.

THE MOVE. What's really in the world of REITs? Health care. Hospitals and nursing homes are doing very well, thanks to the aging of the population. Nationwide Health Properties, for instance, has seen its stock up 90%, to \$27 a share, since January, 1990, when the S. real estate downturn got under way. No wonder. Now boasting 112 facilities coast to coast, National's net income has moved smartly (table).

The apartment market is their winner, particularly in growing areas of the country, since apartments are the ideal abodes of young people everywhere. United Dominion Realty Trust has ridden that trend by concentrating on multifamily housing in the Southeast.

Shopping-center plays are a riskier, since they hinge on economic recovery. Consider Federal Realty Investment Trust, which concentrates on mall outlets in the mid-Atlantic states, a region devastated by the recession. Although revenues are down lately, analysts expect a strong post-recession surge because Federal's shopping centers are mostly in built-up areas with a chance of new competition coming in. In anticipation of that happy day, the stock edged up from 17½ in November to 21 now.

A longtime standout is New York Realty Trust, the largest REIT, recently topping \$1 billion in assets. New Plan, whose stock has risen 35% in the past two years, likes old, well-established shopping centers on the East Coast and in the Midwest. The virtue of these centers is their low rents, about a third of those

in regional malls. That makes keeping tenants and attracting replacements easier. "In bad times, \$5 a square foot is a good rent," says William Newman, New Plan's chief executive officer. The biggest criticism of New Plan is that it has not been bold in buying new properties with its \$275 million cash hoard—at a time when bargains abound.

Office and condo market in a big way in the 1980s and is paying for it today. Says Myron Ginsburg, BRT's treasurer: "We're spending all our time foreclosing on mortgages."

One once-popular trust in disrepute is the finite-life REIT, whose heyday was the mid-1980s, when real estate prices seemed destined for never-ending growth. The al-

'84 is considering shifting to a less-restrictive REIT setup.

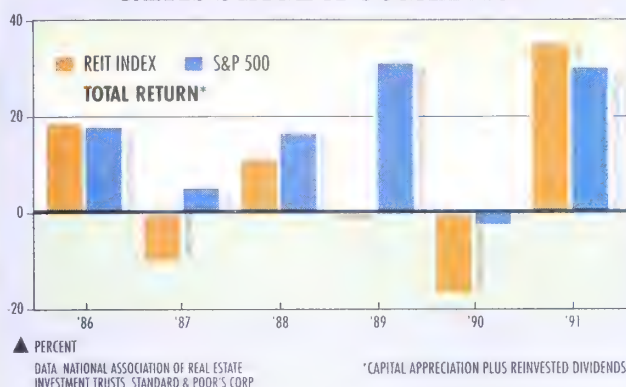
The worst is probably ahead for mortgage REITs, especially for the many trusts that are heavily invested in collateralized mortgage obligations (CMOs). The massive refinancings of late are having a delayed reaction on CMOs, which are bonds based on pools of hundreds of residential mortgages. Because refinancings take time to process, significant numbers of bonds won't be affected much before early spring. Then, the REITs will get their principal returned, which means they'll have to reinvest at currently less-ouplent rates.

'UNCHARTED TERRITORY.' Since CMOs were only invented in the mid-1980s, Wall Street has no idea how they'll weather the new low rates. "This is uncharted territory," says analyst Elaine Derso of Prudential Securities. Whatever the severity of the next few months for CMOs, the lush days are certainly over for major CMO holders such as Asset Investors. In two years, the stock doubled in price, to 16½ by November. But since then, the market has dragged it down to 12 because of refinancing worries. The company doesn't dispute analysts' predictions that Asset Investors will end up cutting its \$2.70 yearly dividend to \$2.

Bear in mind, however, that REIT rebounds can come sooner than you might expect. Present dilemmas may mask underlying strengths. Consider Dial REIT, an owner of shopping malls in the Midwest. Despite the recession, its stores were 95% leased in late 1990. Then, it had to empty 4 of its 20 centers for renovations. The result: Earnings are down, the dividend was cut, and the stock has skidded. But to Bruce Garrison, president of Garrison Brothers, a Houston investment bank specializing in REITs, these woes are temporary. "Once the renovations get out of the pipeline, they'll be O. K.," he says. After all, in real estate, what goes down is likely to go up again someday.

Larry Light

REITs STAGE A COMEBACK



THE LEADERS...

Explanation	Stock performance*
NATIONWIDE HEALTH PROPERTIES Focuses on sizzling nursing-home market	90%
NEW PLAN It has well-located, fully leased shopping centers	35
UNITED DOMINION Owns apartment buildings in the growing Southeast, where tenant demand is high	23

...AND THE LAGGARDS

FIRST UNION Heavily invested in retail and office buildings, which are hit hard by recession	-47%
HOTEL INVESTORS Its industry is suffering from room vacancies because of 1980s hotel overbuilding	-71
SIERRA 84 Trust structure requires it to sell its buildings soon even though market is depressed	-84

* Price change, Jan. 1, 1990, to Feb. 1, 1992

DATA: BRIDGE INFORMATION SYSTEMS INC., BW

REITs suffering difficulties have invested in condominiums, offices, and hotels—all of which were overbuilt in the 1980s and have huge troubles now. That's the case with Hotel Investors Trust. This REIT posted an operating loss of 30¢ a share in its third quarter, and the stock has swooned. BRT Realty Trust went into the New York of-

ture of these REITs was that they are obliged to sell off their buildings in eight years or so, giving investors a big gain. But the market of the early 1990s hasn't been receptive. Sierra Real Estate Equity Trust '84, which closed in 1985, faces a possibly grim experience selling its six industrial properties and one shopping center. To escape, Sierra

Leisure

WANNA SOLVE A MURDER? TAKE A CRUISE

For some cruise lines, it's not enough just to offer passengers a generic week of fun in the sun, all you can eat, and shopping till you drop. Now, they're selling themes as well. So bagpipe players can convene on the Cunard Countess in May for a Scottish festival. Amateur sleuths can test their powers of deduction during murder-mystery cruises aboard Cunard's Queen Elizabeth 2 this spring and summer. And chocolateolics can gorge on samples from 20 manufacturers during the Costa Classica's October chocolate fantasy outing.

Theme holidays help cruise lines fill ships during less-popular months. They also enable

passengers to take advantage of off-season rates and group discounts. The chocolate cruise in the Caribbean, which includes a "bon bon" voyage party and year's subscription to *Chocolatier* magazine, starts at \$1,385 per person—\$400 off the regular price.

With so many cruises to choose from, themes "help the first-time cruiser make a decision because there's a focus," says Jo Kling, principal of cruise specialists Landry & Kling, which conceived the chocolate and Scottish events. A shared interest also makes it easier to meet other passengers.

In addition to developing ideas for its own clients, the company has compiled a list of 70 theme cruises. The list (800 223-2026) is a handy



guide for cruisers with special interests.

For example, smokers trying to quit might like the Dolphin's smoke-free cruise, coinciding with the Great American Smokeout in November.

There are also ecology

tours, jazz and big band cruises, film festivals and comedy weeks. Norwegian Cruise Lines (800 327-4343), one of the biggest in the theme business, is offering a Universal Studios cruise in August, featuring costumed characters and stunts from the company's films. "I'm afraid of turning deck potatoes can sport weeks, coaching by professional athletes." Cunard (800 247-770) lets passengers meet known actors and musicians during Theater at Sea and Music at Sea cruises aboard the Vista and Sagafjord ships. Cunard also sponsors a murder-mystery event aboard the QE2 on trips between New York and Southampton, England. It helps pass the time during those long hours at sea.

Gail DeGor

The Internal Revenue Service's recent decision to drop a challenge to Liquid Yield Option Notes removed any threat to this hybrid investment vehicle. LYONS are now more popular than ever—but are they a good deal for investors?

Invented by Merrill Lynch in 1985, LYONS represent a cross between zero-coupon and convertible bonds. Like zeros, LYONS sell at a deep discount to their \$1,000 face value and make a onetime, lump-sum interest payment at maturity—usually in 15 or 20 years. Current yields to maturity average 7.47%.

But like convertible bonds, LYONS can be exchanged for a fixed amount of the issuing company's stock. So investors can profit from a rise in share price. And if the stock drops, you still make money by holding on to the bond and collecting the principal and in-

Smart Money

LEARNING TO READ BETWEEN THE LYONS

terest at maturity. You can also cash in a LYON for a preset value at "put" dates every five years or so—giving you an out before the maturity date. But the company can pay the puts in stock or notes instead of cash.

It's easy to see why Walt Disney, Seagram, Marriott, and others issued LYONS. They can pay a lower rate than on regular bonds, in ex-

change for the conversion feature. And they can write off the interest each year, even though they don't actually pay any until maturity.

UNLIKELY EVENT. Whether LYONS make sense for investors is less clear. LYONS are "easy to sell but very difficult to evaluate," says John Markese, research director at the American Association of Individual Investors.

Although the conversion feature is a big selling point, investors may never be able to use it, says Alan Lyons, editor of financial newsletter *Value Line Convertibles*. LYONS are sold at an initial premium over the common-stock

price. Their value increases by the accrued interest every year. But the number of shares remains fixed. So as the underlying stock has to rise a lot more than the rate of the bond to make a conversion worthwhile. Lyons cites Sonat, an oil-and-gas company that issued \$575 million worth of LYONS in 1990. Each LYON sold for \$343—a 1% premium over the bond's conversion value of \$336 (5.77 shares trading at 5% on the issue date). After five years, the bond would be worth \$487 (five years of interest at 7.25%). But you still can exchange it for the same 5.77 shares. So the stock would have to rise more than 63% to convert profitably.

Another pitfall: Companies can call their LYONS if interest rates drop. Last year, Merrill Lynch left investors in the lurch by calling \$600 million worth of LYONS yielding 8% due to mature in 2006. The broker was able to borrow at lower rates, proving the LYONS can bite the hand that feeds them.

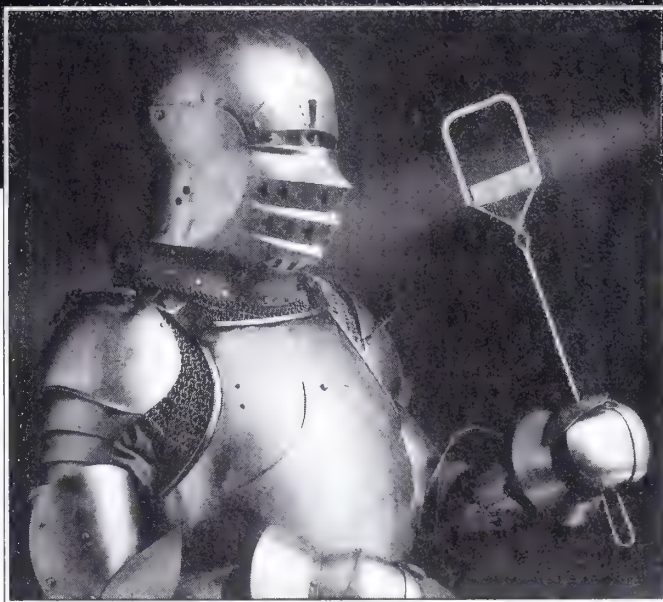
Pam Blau

SOME RECENT LYON ISSUES

Company/ Maturity	Price	Yield to maturity	Initial conversion premium*
MARRIOTT/2006	\$297	8.25%	12.0%
WHIRLPOOL/2011	253	7.00	13.5
EASTMAN KODAK/2011	265	6.75	15.0
RITE AID/2006	369	6.75	12.0
CPC INTL./2006	412	6.00	16.0

*Premium may rise over the life of the issue DATA: MERRILL LYNCH & CO

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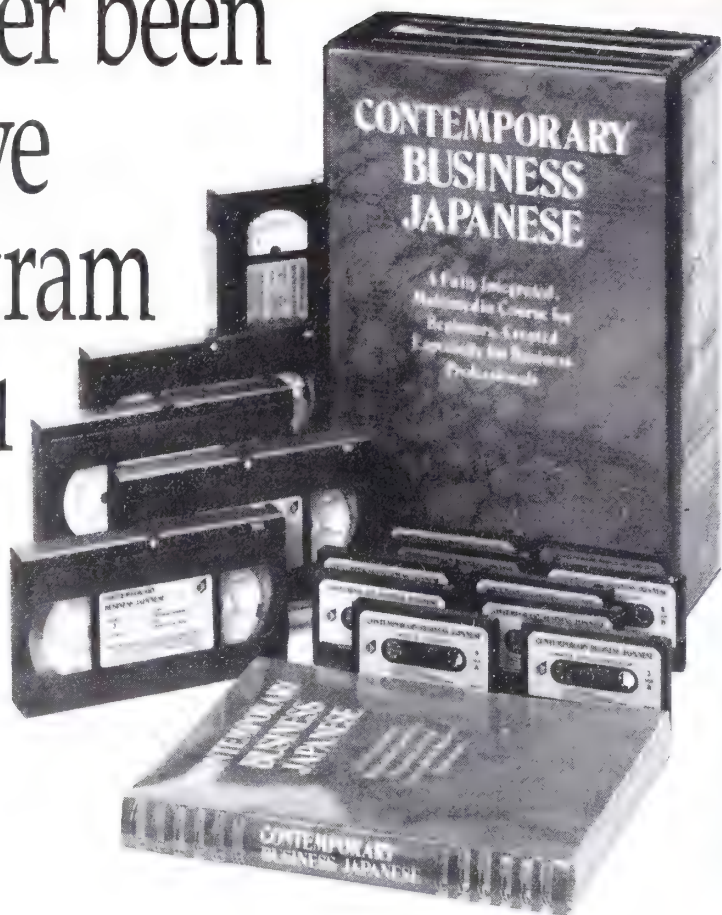
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AD 0359

Music

ORIES WITH O STRINGS TTACHED

Among piano players, the line used to be clearly drawn. Those considered themselves serious about music bought acoustic instruments—the kind seen in concert halls and living rooms. Electronic pianos were for rock musicians, people looking for a good time. They could perform parts, such as backing you up with a rhythm section. But a note sounded the same, no matter how hard or tender you touched a key.

Digital pianos have changed all that. On the market a few years, these keyboards combine the touch, sound, and expressive capabilities of acoustic pianos with the hi-tech tricks of a computer. That marriage has made digital pianos among the hottest sellers in the instrument market.

Compared with acoustic pianos, which range from \$4,000 for a decent upright to \$3,300 for a baby grand Steinway, digital pianos are attractively priced. Portable, often with shortened keyboards, they cost for as little as \$999. Full-sized consoles range from \$1,000 to \$11,000.

NO TEACHER. Digital pianos create the sound of an acoustic instrument through digital sampling—the process used to produce compact-disk recordings. While even the best digital pianos can't match acoustic instruments, produced by masters striking strings, they come close. Sound engineers strike each key



on a concert grand, then store the sound digitally. Each note is recorded many times, at varying dynamic levels and speeds.

When you play a digital piano, you hear the sound of an acoustic instrument, digitally reassembled, coming through

stereo speakers. Touch a key lightly, and it responds with a note of suitably quiet dynamic level. Sampling technology has become extremely sophisticated, so that the sound produced can reflect subtle changes in touch.

The real excitement of digital pianos comes from the vast array of software for learning to play or composing. Yamaha, for example, offers "guide lamps" that let beginners perform by following a flickering light above the keyboard.

Instrumental accompaniment programs also are available and are more flexible than the Music-Minus-One tapes that let you be a soloist with orchestral accompaniment. With digital software, if you can't match the orchestra's tempo, you can slow the speed with the touch of a button.

Many pianos also offer a sequencer, which lets you store, edit, and play back music to create your own composition. And most come with musical instrument digital interface, or MIDI, connectors, which let the piano communicate with a computer or other instruments.

One application lets you improvise a piece and call it up as a musical score on a PC. You can even have the piano play back from that score.

Convenience is a major selling point. Digital pianos are fairly light, averaging 150 pounds, as weighed against their 500-pound acoustic cousins. There's nothing to tune or maintain. And all digital pianos can be played with headphones, making them popular with apartment dwellers and pianists who practice in the wee hours.

BELLS AND WHISTLES. About a dozen companies, including Korg, Kurzweil, and Technics, sell digital pianos. Yamaha, the leader, markets most of its instruments under the name Clavinova. Its four CLP models, priced up to \$4,700, offer basic features such as additional instrument voices. The \$3,345 CLP560 last year tied Kurzweil's \$3,500 Mark IV for *Keyboard* magazine's "best bang for the buck" award. Clavinova also markets a higher-end CVP series with a broad range of options, including harmonic and rhythmic accompaniment, sequencers, and disk drive. Roland, the No. 2 manufacturer, offers a simpler HP series and a KR series with more bells and whistles.

Acoustic pianos still boast a richness and complexity of sound that digital pianos just can't reproduce. In the best of all worlds, a musician would own both. *Andrea Rothman*



FEATURES TO LOOK FOR ON A DIGITAL PIANO

TRANSPOSER Shifts playing into different keys. Helpful for accompanying singers. Available on most instruments

VOICE SELECTION Lets piano create sound of many different instruments. Kurzweil's top model offers 100 voices, Yamaha's, 53

RHYTHMS Selection of rhythmic accompaniments, including rock, boogie, samba, and waltz. Only on higher-priced instruments

HARMONIC ACCOMPANIMENT Backs up melody with bass and chord patterns. Only on more advanced models, including Yamaha CVP series

DISK DRIVE Reads 3.5-inch floppy disks. Available on higher-priced pianos, but separate components can be attached to simpler models

SEQUENCER Digital recorder that lets you create and edit your own performance. Recording can be assembled in stages, beginning with melody and following with additional layers of music

DATA: EN

Worth Noting

■ **POUNDS LIGHTER.** The British pound is worth more than the dollar, but Radisson hotels in London are offering a special rate through Apr. 30. For example, rooms priced at £69.50 cost \$64.50. Reservations: 800 333-3333.

■ **SUMMER READ.** A lavish coffee-table book, *A Paradise Called Pebble Beach* (Golf Digest Books, \$40), will be in stores before the U.S. Open begins June 18 at the famed West Coast site. It's rich with history, celebrity gossip, and fabulous photos.

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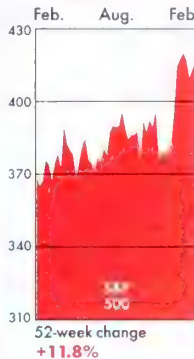
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Investment Figures of the Week

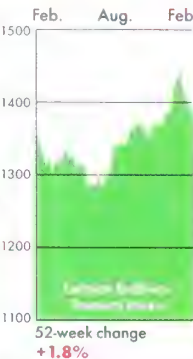
MENTARY

It took it on the chin this week as interest rates continued to rise, the decline more pronounced than all-company issues than in the daily dominated Dow industrials. Although there are scant signs of recovery, that is jacking up both interest rates and the prices of the cyclical, especially homebuilders and makers. Despite the sell-off, the equity market looks like a giant compared with what has happened in Tokyo. Stocks there edged 4.3% this week and are 13.3% vs. a year ago.

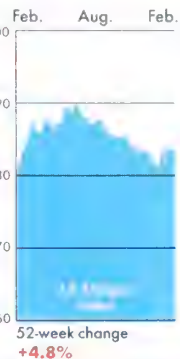
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS	Latest	Week	% change	52-week
JONES INDUSTRIALS	3230.3		-1.4	11.4
COMPANIES (Russell 1000)	217.2		-2.2	14.2
COMPANIES (Russell 2000)	208.4		-2.0	34.0
COMPANIES (Russell 3000)	232.4		-2.2	15.3

REGION STOCKS	Latest	Week	% change (local currency)	52-week
FINANCIAL TIMES 100	2536.7		0.5	10.4
NIKKEI INDEX	20,618.3		-4.3	-21.3
TSE COMPOSITE	3543.3		-1.5	1.4

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.95%	3.85%	6.1%
30-YEAR TREASURY BOND YIELD	7.92%	7.81%	8.0%
S&P 500 DIVIDEND YIELD	2.99%	2.95%	3.3%
S&P 500 PRICE/EARNINGS RATIO	24.7	25.2	16.8

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	395.3	394.2	Positive
Stocks above 26-week moving average	69.6%	71.6%	Neutral
Speculative sentiment: Put/call ratio	0.34	0.34	Neutral
Insider sentiment: Vickers sell/buy ratio	1.79	1.62	Positive

INDUSTRY GROUPS

4-WEEK LEADERS

	4-week	52-week
MACHINE TOOLS	17.0	29.3
HOMEBUILDING	16.6	75.8
OTOMOBILES	12.4	10.2
AMING	11.7	47.2
ENTERTAINMENT	10.4	16.5

4-WEEK LAGGARDS

	4-week	52-week
NATURAL GAS DISTRIBUTION	-9.5	-26.2
HEALTH CARE SERVICES	-8.9	68.3
ENGINEERING AND CONSTRUCTION	-8.2	-5.1
MEDICAL PRODUCTS AND SUPPLIES	-8.0	20.9
AL	-7.7	-8.0

Strongest stock in group

	4-week	52-week	Price
CINCINNATI MILACRON	21.8	20.7	16 3/4
KAUFMAN & BROAD HOME	17.7	77.1	23 1/4
CHRYSLER	17.0	33.7	16 3/8
MIRAGE RESORTS	22.4	26.0	32 3/4
WALT DISNEY	11.4	24.3	146 1/2

Weakest stock in group

	4-week	52-week	Price
PACIFIC ENTERPRISES	-28.9	-57.5	18 1/8
ALZA	-13.3	29.8	40 7/8
FLUOR	-9.4	-6.2	43 5/8
BIOMET	-17.3	74.0	20 7/8
EASTERN ENTERPRISES	-11.2	-14.6	24 7/8

MUTUAL FUNDS

LEADERS

4-week total return	%
BERMAN DEAN	12.8
HARTLAND VALUE	11.2
FIDELITY SELECT SAVINGS & LOAN	9.3

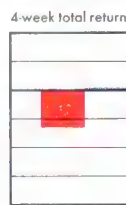
52-week total return	%
AMERICAN HERITAGE	97.0
PENPHEIMER GLOBAL BIO-TECH	90.0
BERWEIS EMERGING GROWTH	70.7

LAGGARDS

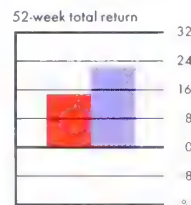
4-week total return	%
STRATEGIC INVESTMENTS	-13.3
STRATEGIC GOLD/MINERALS	-10.5
UNITED SERVICES GOLD SHARES	-9.5

52-week total return	%
STRATEGIC GOLD/MINERALS	-29.7
FIDELITY SELECT ENERGY SERVICES	-23.4
G. T. JAPAN GROWTH	-18.5

S&P 500



Average fund



RELATIVE PORTFOLIOS

Amounts represent the present value of \$10,000 invested one year ago in each portfolio. Percentages indicate daily total returns.



U. S. stocks
\$11,385
-1.54%



Treasury bonds
\$10,894
-1.84%



Money market fund
\$10,485
+0.07%



Foreign stocks
\$10,050
-3.71%



Gold
\$9,694
-0.56%

Data on this page are as of market close Wednesday, Feb. 19, 1992, unless otherwise indicated. Industry groups include S&P 500 companies only; performance and share prices are as of market close.

Feb. 18. Mutual fund returns are as of Feb. 14. Relative portfolios are valued as of Feb. 18. A more detailed explanation of this page is available on request.

COMMON SENSE ON THE CAMPAIGN TRAIL

The untelegenic gentleman who won the New Hampshire Democratic primary did so with a somber message for somber economic times. In the coming weeks, as the campaign progresses and, as is likely, the economy begins to show some signs of life, it will be interesting to see whether the "Call to Economic Arms" that former Senator Paul E. Tsongas has put forward travels well.

It deserves to. The long-term problems that have been eroding U.S. competitiveness—low savings, low investment, a focus on short-term results, a disappointing educational system, and overdependence on foreign energy supplies, to name just a few—will still be with us when the economy begins a cyclical rebound. Tsongas may or may not be Presidential material. But we think he suggests some worthwhile antidotes to these economic problems. And what Tsonganomics offers is far more comprehensive than George Bush's one-note call for a capital-gains tax cut as America's economic salvation.

Although Tsongas espouses a liberal social agenda, he embraces some positions that are probusiness—indeed, he prides himself on doing so. Taxes on capital gains are a case in point. Tsongas figures the tax rate should be cut, but only on long-term investments in Corporate America. As one element of a long-term growth strategy, Tsongas' position makes sense. Other elements we like: Put science and research at the top of the federal-funding agenda. Emphasize early childhood education programs. Offer technical training to noncollege-bound students. Raise the gasoline tax. Introduce new savings incentives. Change the antitrust laws to permit more collaboration and cooperative ventures between U.S. companies. Some ideas are more controversial: Promote nuclear energy, despite its risks, as a way to deal with the far greater threat of global warming. Pursue "economic loyalty," but avoid a "mindless Buy America policy."

Above all, though, Tsongas is making a plea for business, the public sector, and citizens to link arms and make the American economy strong again. Democrats must realize that policies of wealth creation help everyone. And Republicans must recognize that government does have a role to play in encouraging certain technologies. What Tsongas is proposing isn't a narrow industrial policy. Instead, it's an ambitious job-creation strategy for the 1990s.

NEXT, THE SEC SHOULD ZERO IN ON PROXIES

The Securities & Exchange Commission on Feb. 13 gave shareholders the right to question executive compensation through proxy resolutions. Even better, it proposed rules requiring that pay packages be disclosed in a more meaningful way. These admirable moves should please investors—as well as ordinary Americans—galled by the es-

calating compensation pocketed by U.S. corporate executives, no matter their performance. With one job well done, the SEC should now move on to another: It should reform the proxy system to make managers more accountable to shareholders and shareholders more effective owners.

Many executives like the freedom they have under current rules, which are stacked against shareholders. But this freedom has poisoned management-investor relations. And it has made shareholders impatient with managers, who consequently shorten their investment horizons to the detriment of the nation's competitiveness.

Proxy reform, under study for two years, can help redress this imbalance. For example, the SEC should require companies to turn over shareholder lists to other shareholders on a timely basis. And its prohibition against communicating among stockholders who aren't engaged in a contest of control isn't necessary, though it may want to require them to notify the SEC of their talks. And the SEC should require—or at least encourage—companies to institute confidential voting of proxies.

These are simple changes, hardly likely to cause a revolution in America's boardrooms. But with responsible behavior on both sides, the reforms could eventually improve the relationship between managers who run corporations and the investors who own them.

DON'T PULL THE PLUG ON ARTIFICIAL INTELLIGENCE

For decades, artificial intelligence has been a staple of science fiction—from the Hal computer in *2001: A Space Odyssey* to the Arnold Schwarzenegger character in *Terminator 2*. Add to that a large dollop of media hype and inflated promises by scientists and entrepreneurs, and you begin to see why fantasy left the reality of artificial intelligence in the dust.

These days, a less ambitious technology—call it "applied intelligence"—is emerging as a major force in computer software (page 97). Programmers have come up with systems that, instead of attempting to replicate human thinking, embody human experience and expertise. Instead of software that thinks, we have software that "knows"—whether it's how to pick a stock, detect tax fraud, or give a prognosis more reliably than most human doctors. Applied intelligence is simply a way to apply human knowledge, via computers, to real-world problems.

Do signs of success mean that U.S. computer scientists should abandon their quest for true artificial intelligence, machines that somehow learn and reason like people? Not a likely prospect. On Apr. 1, Japan's Ministry of International Trade & Industry kicks off a \$1 billion, 10-year research effort in artificial intelligence. This is clearly not the time for the U.S. to give up on research that could still yield a large payoff. Universities and government research centers could provide the next breakthrough. In one intriguing example, Carnegie Mellon University's prototype of a self-driving car (page 98), might ultimately pay off in a warning system to alert drivers of impending danger.



If it had less legroom, a lesser warranty, and cost thousands more, it could be a Cadillac.

Logic would seem to dictate that when you pay thousands of dollars more for a car, you should get a lot more car. Apparently, in the case of the Cadillac Sedan DeVille versus the Chrysler Fifth Avenue, logic does not apply. Both cars provide ample room for six, air-conditioning, automatic transmission, automatic load leveling, stereo sound system, fully reclining seats, all as standard equipment. Both offer safety and performance. A driver's air bag is standard on the Chrysler Fifth Avenue, as is a powerful fuel-injected, 3.3-liter V-6. Anti-lock brakes are also available. Here, however, is where logic totally



falls apart. The restyled Chrysler Fifth Avenue costs thousands less, yet it has more rear legroom than the largest Cadillac.* And it offers a better warranty: bumper-to-bumper



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—AND HOW IT
PLANS TO STAY
ON TOP



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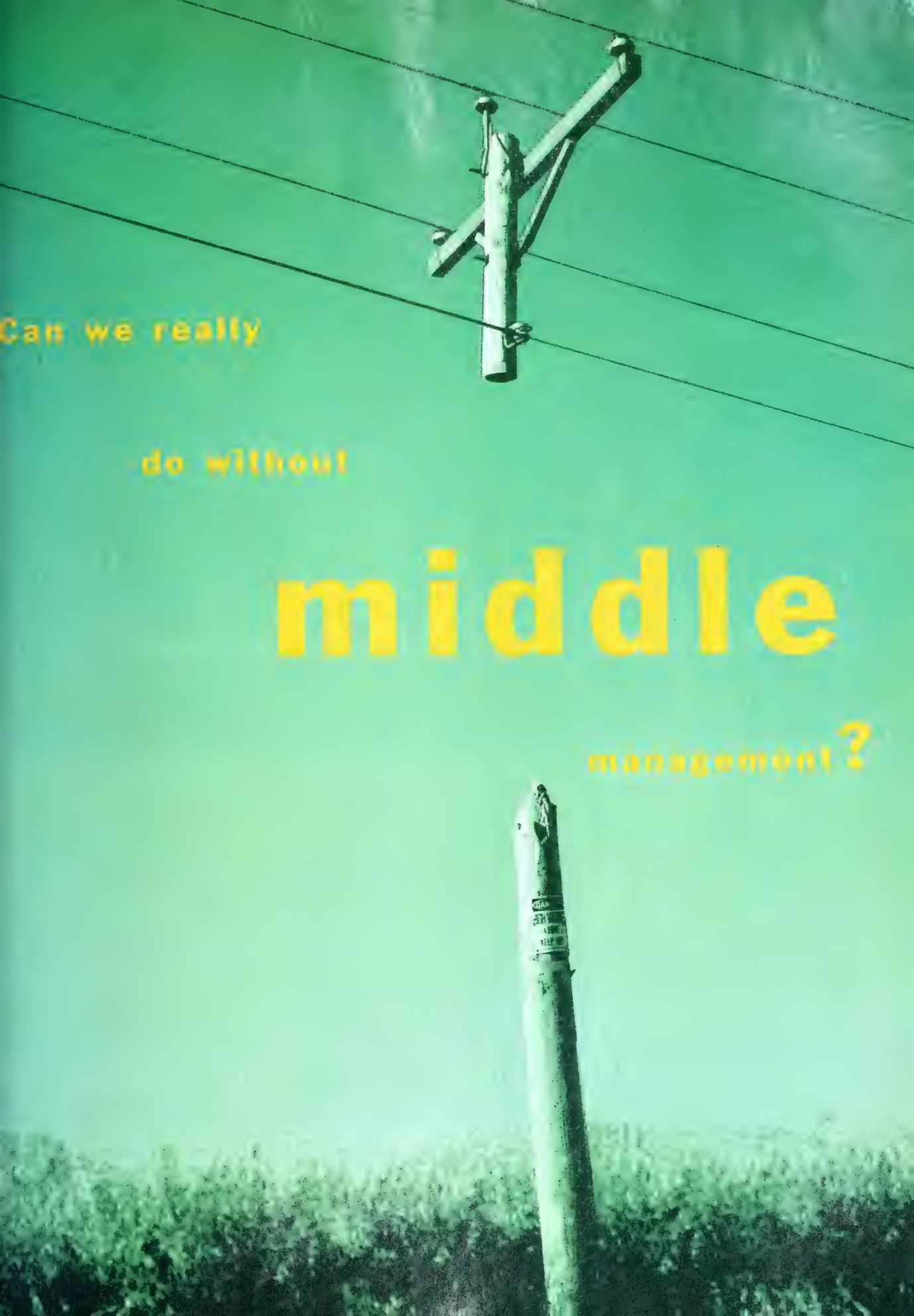
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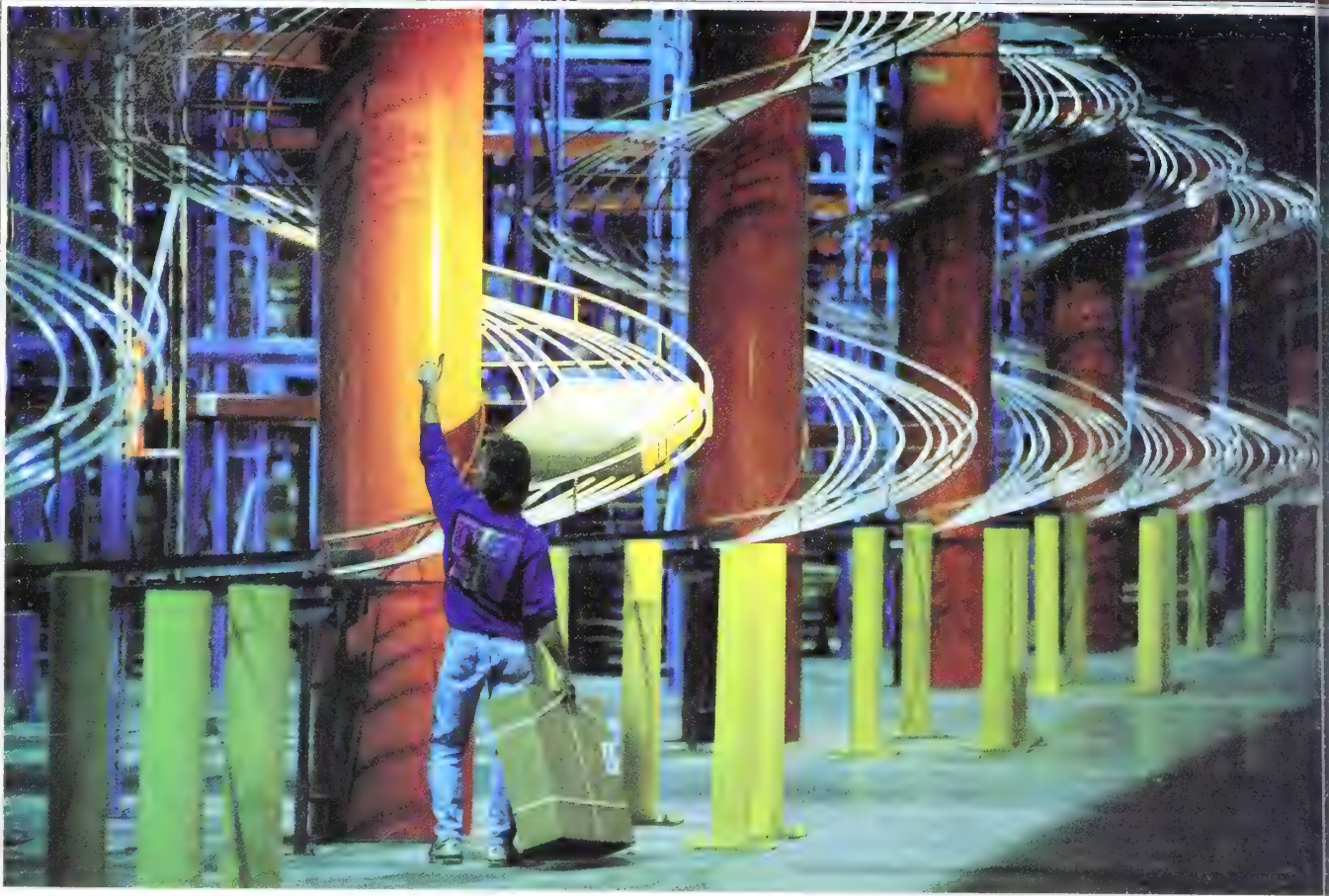


Can we really

do without

middle

management?



REFILLING THE GAPS: A NEW HIGH-TECH DISTRIBUTION CENTER OUTSIDE BALTIMORE WILL SHIP FRESH STOCK TO EAST COAST STORES

Cover Story

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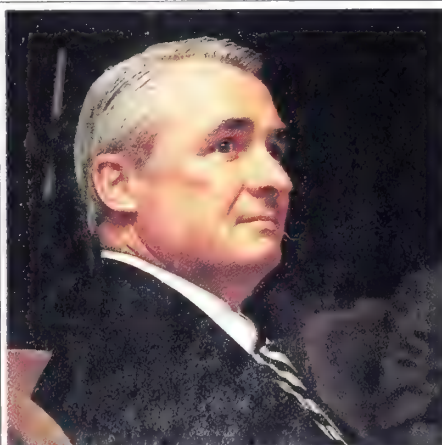
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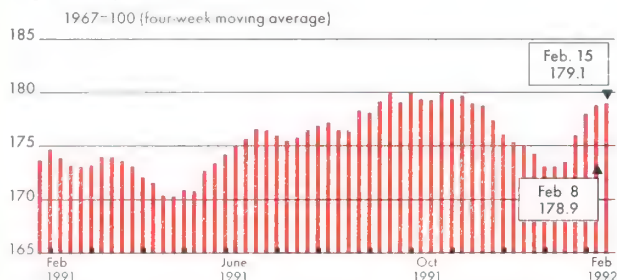
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BusinessWeek Index

PRODUCTION

Change from last week: 0.1%
Change from last year: 3.3%

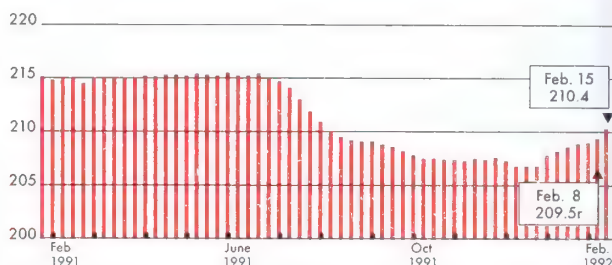


The production index advanced slightly in the week ended Feb. 15. On a seasonally adjusted basis, output of autos was up sharply while steel, electric power, and coal increased as well. Truck, crude-oil refining, lumber, and paper production decreased. Paperboard output and rail-freight traffic were unchanged from the previous week. Before calculation of the four-week moving average, the index rose to 179.2, from a revised 178.9 in the prior week.

BW production index copyright 1992 by McGraw-Hill Inc

LEADING

Change from last week: 0.4%
Change from last year: -2.1%



The leading index increased slightly for the week ended Feb. 15. The biggest positive sign was sharp improvement in the growth rate of materials prices. Higher stock prices and fewer business failures helped as well. On the negative side were higher bond yields and slower growth in real estate loans. M2 growth was virtually unchanged. Before calculation of the four-week moving average, the index increased to 212.3, from 210.4 in the previous week.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (2/22) thous. of net tons	1,803	1,758#	5.5
AUTOS (2/22) units	118,318	107,635r#	-1.3
TRUCKS (2/22) units	75,798	71,181r#	14.7
ELECTRIC POWER (2/22) millions of kilowatt-hours	54,343	57,695#	-0.4
CRUDE-OIL REFINING (2/22) thous. of bbl./day	12,483	12,356#	-5.0
COAL (2/15) thous. of net tons	19,115#	19,336	-7.0
PAPERBOARD (2/15) thous. of tons	815.9#	808.3r	5.2
PAPER (2/15) thous. of tons	766.0#	767.0r	0.1
LUMBER (2/15) millions of ft.	497.5#	516.8	1.4
RAIL FREIGHT (2/15) billions of ton-miles	20.8#	21.0	5.1

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPAA, SFPA, Association of American Railroads.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (2/26)	130	128	134
GERMAN MARK (2/26)	1.60	1.64	1.53
BRITISH POUND (2/26)	1.75	1.75	1.90
FRENCH FRANC (2/26)	5.61	5.59	5.22
CANADIAN DOLLAR (2/26)	1.18	1.19	1.15
SWISS FRANC (2/26)	1.50	1.49	1.33
MEXICAN PESO (2/26)	3,046	3,047	2,964

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (2/26) \$/troy oz.	348.650	353.200	-3.2
STEEL SCRAP (2/25) #1 heavy, \$/ton	89.50	89.50	-13.9
FOODSTUFFS (2/24) index, 1967=100	204.7	205.3	-0.9
COPPER (2/22) c./lb.	105.8	104.8	-8.8
ALUMINUM (2/22) c./lb.	59.6	58.0	-13.7
WHEAT (2/22) #2 hard, \$/bu.	4.42	4.59	59.6
COTTON (2/22) strict low middling 1-1/16 in., c./lb.	50.60	50.57	-36.3

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment.
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (2/21) S&P 500	410.25	414.17	12.0
CORPORATE BOND YIELD, Aaa (2/21)	8.33%	8.27%	-5.4
INDUSTRIAL MATERIALS PRICES (2/21)	95.8	95.9	-0.4
BUSINESS FAILURES (2/14)	458	523	3.6
REAL ESTATE LOANS (2/12) billions	\$404.8	\$403.7	-1.3
MONEY SUPPLY, M2 (2/10) billions	\$3,445.6	\$3,443.0r	2.8
INITIAL CLAIMS, UNEMPLOYMENT (2/8) thous	452	434	-7.6

Sources: Standard & Poor's, Moodys, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusted data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
ORDERS FOR DURABLE GOODS: MFG. (Jan.) billions	\$119.6	\$117.8r	1.5
HOUSING STARTS (Jan.) annual rate, thous	1,167	1,106r	38.3
BUDGET SURPLUS OR DEFICIT (-) (Jan.) millions	-\$15,702	-\$2,432r	NM
REAL GROSS WEEKLY PAY (Jan.)	\$255.60	\$257.52r	0.9

Sources: Commerce Dept., Treasury Dept., BLS

MONETARY INDICATORS

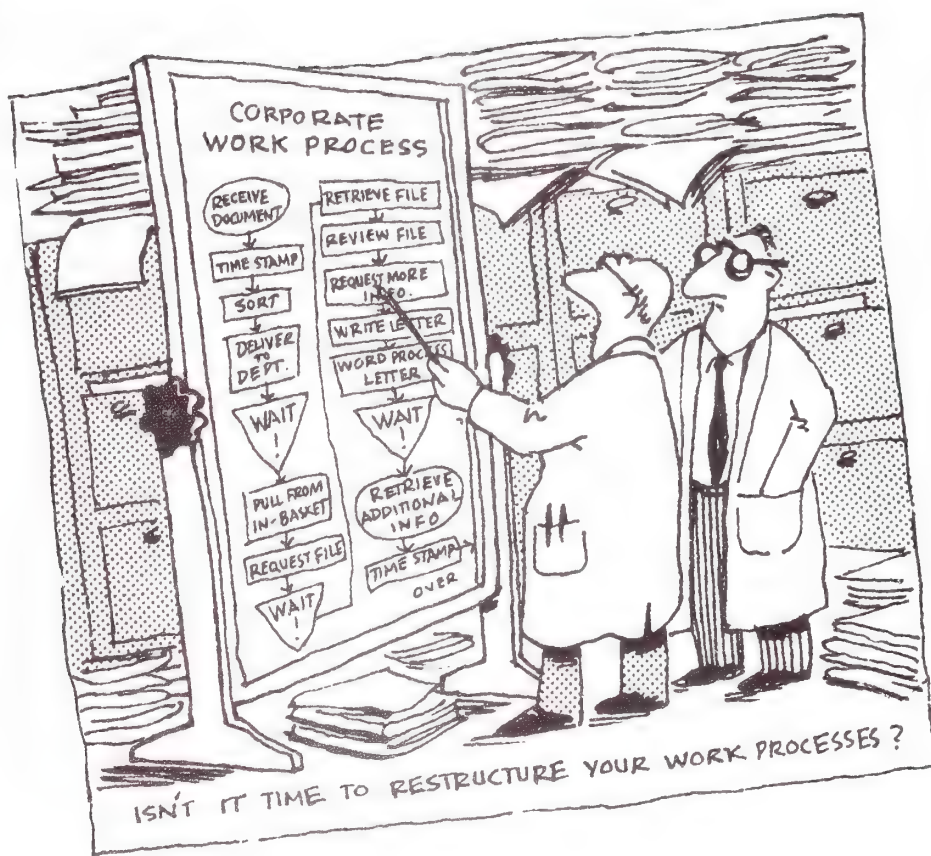
	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (2/10)	\$926.6	\$921.2r	10.8
BANKS' BUSINESS LOANS (2/12)	288.2	290.6r	-10.9
FREE RESERVES (2/19)	1,110	899r	-30.7
NONFINANCIAL COMMERCIAL PAPER (2/12)	135.3	135.5	-8.5

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for a two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (2/25)	3.97%	4.81%	6.31%
PRIME (2/26)	6.50	6.50	9.00
COMMERCIAL PAPER 3-MONTH (2/25)	4.20	4.14	6.63
CERTIFICATES OF DEPOSIT 3-MONTH (2/26)	4.15	4.12	6.71
EURODOLLAR 3-MONTH (2/22)	4.11	3.91	6.58

Sources: Federal Reserve Board, First Boston



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FORD AND MAZDA: YOU CALL THAT SUCCESS?

In reference to "The Partners" (Cover Story, Feb. 10), you're way off base in your assessment of Ford and Mazda Motors' strategic alliance. Ford ceded its small-car design and manufacturing to Mazda because it couldn't do the job itself. The alliance is a symptom of Ford's weakness in manufacturing and product development, not a solution. As for Ford's much-vaunted presence in Japan, the "Ford-badged" Mazdas being sold in Japan create zero jobs for Americans and have virtually no U.S. content.

By far Ford's biggest manpower commitment (in Hiroshima) is devoted to sourcing Japanese-built cars and parts for the U.S. You call that success?

These alliances don't address two fundamental problems of the U.S. automobile industry: The Big Three still won't or can't make cars in the U.S. for the Japanese market. And they are unable to produce smaller cars for the U.S. market. If this teaming offers "a lesson in cooperation," then the lesson is that the U.S. should throw in the towel and become marketing and distribution arms of Japanese manufacturers.

Sean Brereton
Tokyo

THE KEY TO DETROIT'S IGNITION

While of course an American *keiretsu* system as discussed in your fine piece ("Learning from Japan," Cover Story, Jan. 27) will surely help, the problems of Detroit will not be turned around until management decides to compete with the Japanese on product—that is, with up-to-date automotive engineering. There is a strong clue to all this in your quotation of Hiroshi Kashiwagi: that if U.S. giants started making better use of their vast storehouse of technology, Japan could not compete with us. The auto industry is a prime example, because none of the brilliant technology we see in Japanese cars was developed there. Twin overhead camshafts, four-valve-per-cylinder engines, multiport sequential fuel injection, four-wheel

independent suspensions, and on and on. Most of it was developed in the U.S. and was ignored by Detroit for as long as possible.

William C. Lloyd
Madison, Wis.

THE WRONG RESPONSE TO MERCEDES STICKER SHOCK

In "Mercedes finds out how much is too much" (Marketing, Jan. 20), Maire McAuliffe's rejection of Mercedes' higher prices, which led to her "conscience" attack, did not lead her to consider an American car. She bought a used 1987 Mercedes.

Unfortunately, her "foreign is better" syndrome is typical of current thinking, even though "American-built" quality is on a par with most foreign products.

James H. Davis
Columbus, Ohio

BIG COMPANY SHOULD NOT EQUAL BIG SALARY

Regarding your article "Just how excessive are the pay scales of U.S. CEOs?" (Economic Trends, Jan. 27), Ira Kay, a compensation consultant, defends high U.S. CEO salaries by saying: "CEO pay, unlike the pay for lower-level employees, is largely pegged to the size of the organization. The larger the organization, the bigger and more complex the job." While these statements are true, they do not support higher pay for U.S. CEOs. In fact, they reveal the problem: U.S. executives are generally paid to increase the size of their companies, not to improve productivity or to increase shareholder value. But in many cases, making a company smaller and less complex will generate productivity and value improvements. For example, in terms of stock performance, the U.S. electric utilities that grew the least in recent decades outperformed their growth-oriented counterparts (*Financial Analysts Journal*, April-May, 1990). Executives who attempted to limit the size of their companies by promoting energy efficiency deserved the highest salaries.

Unfortunately, the high salaries continue to go to the largest companies. CEO pay based on corporate size is merely a

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Readers Report

reflection of American culture's assumption that bigger is better. In the modern world economy, such a philosophy is likely to cause a corporation and its shareholders to suffer.

Steven G. Kihm
Senior Financial Economist
MSB Energy Associates Inc.
Middleton, Wis.

WHY JAPANESE EXECUTIVES DESERVE LOWER PAY

After four years working at a senior level for a Japanese giant, I think the notion that U.S. executives earn too much, compared with Japan, is really wrong, when viewed from a shareholder's point of view ("How much Japanese CEOs really make," *Top of the News*, Jan. 27). An American CEO functions as an individual, while the Japanese CEO is only one member of a group.

When was the last time you saw a Japanese executive (of any rank) travel alone, attend a meeting alone, or make a decision alone? Of course, they have to pay each executive less because they have so many more to pay: more salaries, more country clubs, more chauffeurs, more hours in nightclubs, more

first-class travel, and more company-jet time. Seems to me that it works out about the same as paying a few people a large sum.

At least a U.S. executive can make a decision in a hurry. The Japanese planning process makes Congress look like a fast-moving operation, although admittedly they do keep at it day and night, year in and year out.

Al Forbes
Mountain View, Calif.

MAYBE FREE TRADE IS NOT THE RIGHT TARGET

Japan's insidious pursuit of profit, if left unchecked, will always produce an imbalance of trade in its favor ("When free trade carries too high a price," *Editorials*, Jan. 27). While the Japanese target profit, to our detriment, we embrace free trade as if it had more intrinsic worth than profit. The resulting cost to our nation has been horrendous. Given Japan's opposition to open markets, today's economic doldrums beg for change: from unilateral free trade to managed equal trade.

Donald J. Aldrich
Fair Oaks, Calif.

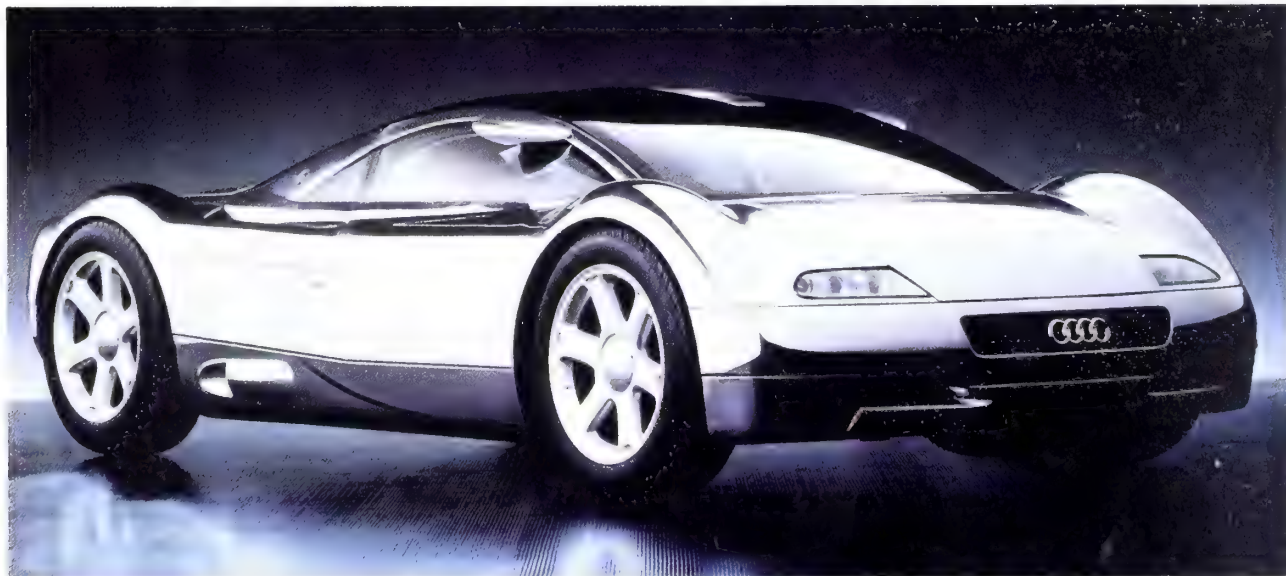
ORDERING FROM A REAL ESTATE AGENT'S MENU

As a Cleveland area Realtor, I believe "The lawsuit that could cut home prices" (*Finance*, Jan. 20) is misleading in its simplification. Even if nonmember companies are allowed access to the computerized Multiple Listing Service, it does not follow that commissions will necessarily be reduced. They are negotiated between sellers and brokers, not dictated by local boards of Realtors. In fact, that would be construed in Ohio as price-fixing and, as such, illegal. What will save sellers money in marketing properties is the trend in some places to brokers to offer services *à la carte*. Sellers who don't want to take advantage of all the agent's services will be able to choose among those offered.

Gerald A. DeLong
Coldwell Banker Hunter Realty
Beachwood, Ohio

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AUDI SURPRISE HIT OF TOKYO AUTO SHOW.



At this year's Tokyo Auto Show, an unexpected entry emerged as the runaway showstopper: The Avus Quattro from Audi. The Avus boasts a high-strength alloy body, 509 horsepower, and a 60-valve, 12-cylinder engine. Even more impressive may be its 0-60 time of less than 3 seconds. Since Audi is rumored to be creating only a limited number of this exotic car for the European market, American car buyers may want to consider Audi's other, more practical, new model — the Audi 100 V-6. With 172 hp, ABS and driver's side air bag standard, the all-new Audi 100 also features a more reasonable price tag: \$28,500*.

—KARL TREUTLER, DETROIT

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BREAKING WITH TRADITION: WOMEN AND WORK, THE NEW FACTS OF LIFE

Felice N. Schwartz

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THE PREGNANT SILENCE IN CORPORATE AMERICA

It's time for some role playing. Here's the scenario:

A 22-year-old woman, a recent graduate of a top journalism school, lines up an interview with the editor of a great newspaper. Right off the bat, he asks whether she plans to have children. How should she respond?

A feminist writer plays the role of the job applicant. "What kind of question is that?" she retorts. "It's not relevant to my qualifications for this job."

"I really need to know," the editor says. "What are your plans?"

Citing Title 7 of the Civil Rights Act of 1964, the aspiring journalist threatens legal action and refuses to answer.

Me? I'd hedge. Now a working mother with two young kids, I remember how desperate I was seeking a job in journalism in my 20s. Should I have addressed matters of pregnancy, maternity leave, and flexible hours? They didn't concern me then. And consider my competition: a bevy of young men who could promise 100% devotion to the company. Sure I'd want kids some day, but this was hardly the time to suggest I might need time off to raise them.

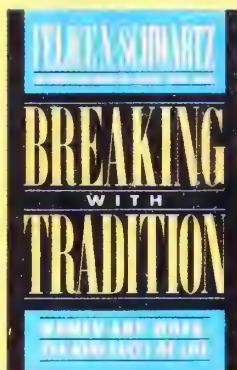
Don't expect Felice Schwartz to participate in this "pattern of silence." In *Breaking with Tradition: Women and Work, the New Facts of Life*, Schwartz contends that not only women but also Corporate America must address head-on the problems facing women in the work force. Failure to confront the issues of motherhood and child-rearing, she says, hurts women and business.

So how did Schwartz answer the question from the "editor" when she was playing the role of the job seeker in a panel discussion? She said she did expect to have kids but was currently "on fire with journalism, ready to give my all." Would she leave the paper when she had a child? Well, she'd want to play an active role in her child's life, but her career was essential. She might choose to work part-time for a "finite period," before

coming back to "my former fast pace."

Such openness, Schwartz says, helps shift the dialogue between employer and employee from "confrontation to conciliation." More than that, putting the issues on the table is a prerequisite for resolving them. "Denying that women have babies leads to a self-fulfilling prophecy of failure for women and their employers," she says. "When employers don't provide flexibility and women don't assert their need for it, the attitudes, behaviors, policies, and practices of employers remain unanalyzed, unchal-

When women
and employers fail
to face the issues
of child-rearing and
maternity, both lose



lenged, and unchanged. Then, women find they can't handle the cumulative pressures of motherhood and a career." The results are bad for everybody: Productivity may lag, and women with valuable skills may drop out. Until babies become part of a corporation's planning, she says, the problems will persist.

So *Breaking with Tradition* is more a warning to corporate executives than a plan of action for women. As head of Catalyst, a not-for-profit organization that helps companies resolve "women issues," Schwartz contends that dealing with the needs of working mothers makes good business sense. As the proportion of males in the U.S. population shrinks, she says, businesses will need talented women. The need will only increase as the U.S. feels the impact of a sharply lower overall fertility rate.

The main problem with her approach is that it's unrealistic, especially in 1992,

as the recession forces huge layoffs of male and female workers. Even when businesses rehire, as they are doing on Wall Street, they're not replacing everyone. Some are shrinking their work forces permanently, in part through automation. Can women afford to venture out on the limb Schwartz proffers?

Schwartz gained a measure of notoriety in 1989, when she published a *Harvard Business Review* article urging that women juggling career and family be allowed to pursue a less demanding track than men or childless women. Her idea, which the media dubbed the "mommy track," a phrase she here calls pejorative, set off heated debate. Schwartz, critics said, was condemning working mothers to permanent second-class status.

She takes an entire, often excruciatingly self-serving chapter to explain that, on the contrary, she seeks "an alternative track for committed professionals." That means allowing women to cut back on hours for as long as five years, then return "refreshed, enriched by the experience of parenting, free of guilt, and ready to go full speed for a total of 36 years." That way, companies that have invested in training women before they had kids can retain their talent.

Schwartz's book suffers from a lack of fine-tuning. The final chapters are repetitive, and I could do without a section with a simple-minded diagram in which she argues that the traditional corporate

pyramid should give way to a "jungle gym," in which employees can move in any direction, depending on their needs. She also goes on at length about a female B-school grad who removed her wedding ring for a job interview—show how women dodge the issues. My own informal poll suggests this practice is not widespread.

Schwartz's candor is her greatest asset. By breaking "the conspiracy of silence" on issues that impede women's ability to compete at work, she forces readers to take a hard look at the problem. But how candid would I be? Again I put myself in the shoes of a young job seeker. The editor asks: "Do you plan to have children?" How do I answer?

I'd hedge.

BY JOYCE BARNATHA

Barnathan has worked full time—and the same—as a journalist in Moscow and New York, and will soon head for Hong Kong.

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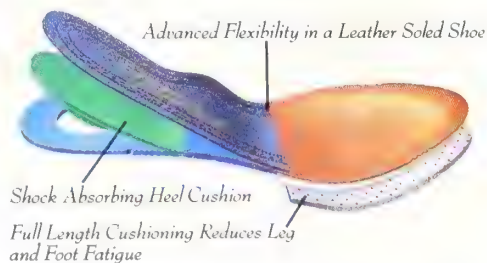
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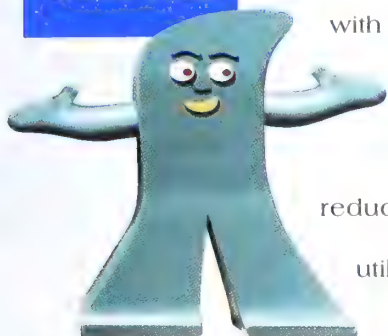
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THE STATE OF THE UNION ADDRESS THAT SHOULD HAVE BEEN

BY ALAN S. BLINDER



What if the President had withstood the pressure for a quick economic fix rather than caving in to political expediency?

The following draft of the State of the Union address was not delivered by President Bush:

My fellow Americans, the stubborn recession has given rise to demands for a quick fix. This is understandable. The slump has lasted longer than expected, and patience is not among our democracy's great virtues. So opportunistic politicians of both parties are now dusting off their pet nostrums and offering them as recession-busters.

The political pressure to "do something" is intense. I have been urged to grant tax relief to the middle class, to restore tax preferences for capital gains, to help the real estate and yacht-building industries, to create more tax breaks for homebuilding, and so on. No doubt, each such measure would buy me some political support at a time when I could sure use it. But a President is supposed to act Presidential—to do the right thing rather than the politically expedient thing.

Ladies and gentlemen, we must remember that the U.S. economy will outlast the November election. And the eyes of the President must focus steadfastly on that future. So, my fellow Americans, I have come here tonight to tell you that I have rejected the politically expedient course and to explain my reasons.

I understand why so many of you are clamoring for tax cuts. Times are tough—I know that. And a decade of shifting the tax burden away from the rich has created a prima facie case for redress on grounds of social justice. But those who demagogue the issue conveniently ignore a few facts. First, that the poor fared even worse than the middle class in the 1980s. Second, that Americans are not overtaxed; as a share of gross domestic product, our tax burden is about the lightest in the industrial world. Third, that even after subtracting the effects of recession and the costs of deposit insurance, a structural deficit of about \$200 billion remains in the federal budget. Fourth, that the U.S. has a long list of unmet public needs, ranging from funding Head Start to repairing dilapidated bridges. And fifth, that middle-class tax cuts are bound to mean a loss of revenue when the politically accepted definition of "middle class" includes almost everyone.

BIG SPENDERS. Political pundits have urged me to take steps to boost consumer spending before the election. Perhaps the crassest suggestion was to manipulate withholding schedules so that people would have more spendable income in 1992 and less in 1993. I told them that Americans are no fools, and rejected the idea. They also wanted me to let people in-

vade their individual retirement accounts without penalty. Ladies and gentlemen, it's time we faced up to the fact that underconsumption is not America's problem. We are the biggest spenders on earth; it is in saving and investing that we fall short. Why, in 1991 we set a record by consuming 68.5% of our GDP. Should we drive this ratio even higher? What of our future? What of our children?

Knowing that the majority of voters own homes, cynical politicians are promoting schemes that would raise real estate values like a \$5,000 tax credit for first-time home buyers, or relaxing restrictions on tax shelters that were so painfully won in 1986, or allowing home buyers to tap their IRAs. My fellow Americans, the logic that drives these suggestions is political, not economic. The fact that our country has not underinvested in real estate. We are the best housed people on earth, and the tax code already favors housing. The vacant stores and office buildings that now litter the American landscape not only remind us of the ways things were, but ensure us that relaxing restrictions on real estate tax shelters will merely raise property values, not create more jobs.

SLOW MEDICINE. And so, my friends, I have rejected the quick fix. But that does not mean standing idly by. The Federal Reserve has already lowered interest rates considerably, and Chairman Alan Greenspan assures me that further cuts will come if necessary. Unlike the fiscal nostrums you have been hearing about, the medicine of lower interest rates acts on precisely that part of the economy that needs the help—investment for the future, not consumption for today. Unfortunately, this medicine is slow-acting. So patients who take it—and that means all of us—must show a little patience.

For our part, the Administration must redirect its budget priorities toward the future. One thing that surely means is a smaller deficit. With the recession lingering, 1992 is the wrong time to trim the deficit. But we must not aggravate the long-run budget problem by giving away more revenue. Beyond that, the government must not scrimp on investments in America's future. That means public infrastructure projects such as roads and bridges. But it also means investments in human capital, ranging from the poor child in early-childhood education to our top graduate students in science and engineering.

Together, we can make a brighter, more productive America. Just as all of you routinely invest in your families' futures, I am asking you tonight to face the facts and invest in America. Good night, and God bless you.

ALAN S. BLINDER IS THE GORDON S. RENTSCHLER MEMORIAL PROFESSOR OF ECONOMICS AT PRINCETON AND THE AUTHOR OF *GROWING TOGETHER*.



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BY GENE KORETZ

HOUSING IS COMING TO LIFE—AND AUTOS MAY BE STIRRING

It's axiomatic that no real upturn can take hold without solid improvement in the bellwether housing and motor-vehicle industries. That's not only because they account for nearly 9% of gross domestic product, but because their growth has a strong impact on the economy's cyclical swings—far outpacing its downward and upward movements during contractions and recoveries.

Fortunately, at least one member of the wedding seems to have arrived. Single-family housing starts have been moving higher since early last year, and are now 51% above their cyclical low. With builders reporting a recent sharp rise in traffic of prospective buyers and with

higher. For one thing, the recent pace of domestic-car sales is actually somewhat above the current level of production. For another, dealers' inventories of domestic cars are extremely lean (chart)—far below the levels they reached during the 1981-82 recession. "That means that auto makers will have to increase output in the months ahead even if sales just stay at their current pace," he says.

The upshot, in Yardeni's view, is that cars will be making a modest positive contribution to GDP in the second quarter. And if sales strengthen, that contribution will grow, he says, "as production is raised both to keep pace with rising demand and to boost inventories."

At least one industry observer thinks a stronger surge in demand may not be far off. Jack Kirnan of Kidder, Peabody & Co. notes that both showroom traffic and dealer orders for domestic cars are up. Further, he points out that 35% of cars are at least 10 years old, all of the 45 million cars purchased from 1984 to 1986 have been paid off, car financing rates have been falling, and some \$22 billion of automotive debt has been retired in the past 12 months.

"The only thing missing to spark a pickup in vehicle sales," says Kirnan, "is a turnaround in consumer sentiment."

THE TIDAL WAVE OF WORKING WOMEN RECEDES A BIT

Among the victims of the recession, you can count the remarkable post-war surge of American women into the job market. For decades, the proportion of women in the labor force—those either working or seeking work—rose steadily year after year. But in 1991, reports the Bureau of Labor Statistics, this trend was interrupted for the first time since 1962—as women's participation rate fell from 57.5% to 57.3%.

The interruption is somewhat puzzling. Poor job prospects engendered by the recession seem to have affected women 25 years and older, since their labor-force participation rate hit a high in the first half of 1990 and then fell after the downturn began. Yet, as the BLS notes, previous recessions failed to halt the rise in the proportion of women in the active work force.

Another piece of the puzzle is a continuing decline in the participation rate of women aged 16 to 24, which began in 1988. The BLS admits it doesn't understand the reasons for this drop, which now exceeds three percentage points. One factor may be a recent rise in the number of women having babies, even

though an increasing proportion of new mothers are over 30.

In short, several socioeconomic trends, not all of them apparent, seem to be behind the interruption in the movement of women into the work force. And while the BLS had expected this trend to slow sharply in the 1990s, it now thinks future rises could be smaller and more uncertain than it anticipated.

OIL PRICES: THE SAUDIS MAY BE SAYING 'THANK YOU' TO BUSH

It was only a few weeks ago that the price of oil seemed headed high after news stories reported that an OPEC agreement to cut its production quota by 7%, to 22.5 million barrels a day, was done deal. The cut in output was expected to boost the price to \$21 a barrel.

But things didn't work out that way. Saudi Arabia refused to sign off on the deal, and the quota was reset at about 23 million barrels a day, causing prices to plunge from \$20 to \$18.50. Economist Michael K. Evans of Evans Economic Inc. figures that's enough to clip 0.3% of the inflation rate this year.

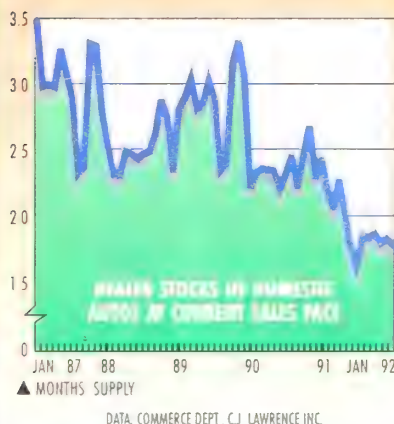
Presumably, the Saudi action was intended to help shore up the world economy. But observers can't help noticing that the kingdom owes a particular debt to George Bush. Whether intentional or not, the Saudi move will boost real income in the U.S., adding zip to the recovery and boosting the chances of reelection for the incumbent in the White House.

LOW INTEREST RATES ARE PINCHING INCOMES LESS THAN IT SEEMS

Some economists claim falling interest rates are a mixed blessing, because personal interest income, currently about \$715 billion a year, far exceeds the \$350 billion in interest payments made to consumers. But Stephen Roach of Morgan Stanley & Co. notes that 40% of interest income represents "imputed" interest—yields on investments in pension funds and insurance policies that aren't really available for spending.

In short, consumers are far less dependent on cash interest income than the gross numbers suggest. And since such income goes mainly to high-saving older households anyhow, the stimulative effect of falling rates on consumption could be a lot larger than many people think.

AUTO INVENTORIES ARE RUNNING LEAN



Washington weighing new incentives for buyers, the only apparent hurdle to a stronger housing revival is the risk that the current upsurge in mortgage rates will continue.

The outlook for cars is more problematic. Although domestic-auto sales have picked up some since mid-January, observers are less than enthusiastic. "The 6.3 million-unit sales pace in the first 20 days of February is nothing to write home about," says analyst Phillip Fricke of Prudential Securities Inc. "All the consumer-sentiment surveys show that consumers are still depressed about the employment outlook and the state of their personal finances. As long as those worries persist, it's hard to see how car sales can accelerate much."

While economist Edward Yardeni of C.J. Lawrence Inc. doesn't disagree, he argues that auto output is still headed



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IN THIS ECONOMY, EVERY SILVER LINING HAS A DARK CLOUD

The road to recovery is getting bumpier by the week. Rising interest rates threaten the housing recovery. A more expensive dollar and weak foreign economies are hurting exports. Weak orders are blocking a pickup in factory output and employment. And poor job prospects generally have driven consumer confidence to levels that raise serious doubts about a turnaround in consumer spending.

To be sure, there are some glimmerings of recovery in the data of recent weeks. All measures of the money supply have accelerated sharply, an indication that the Federal Reserve's past cuts in interest rates are beginning to have some impact. Better looking retail sales, car sales, and housing starts round out the list. However, each bit of good news that comes along seems to get hammered by bad news later on.

The latest example: Consumers spent a little more in January, and one survey's readings for early February showed a slight improvement in consumers' spirits. All this engendered hopes that a consumer-led upturn was imminent. Then came the Conference Board's report that consumer confidence in February dropped to a 17-year low (chart). So much for the hope that consumers are ready to lead the recovery.

THE FED: THE NEXT FEW WEEKS ARE KEY

Recoveries just don't get off the ground while consumer confidence is sinking. The Conference Board's index fell to 46.3 in February, from 50.2 in January. That's the lowest since the depths of the 1973-75 recession.

The survey shows that job security continues to be the prime concern among households. The percentage of consumers who characterize jobs as "hard to get" rose to 49.3% in February, and the uptrend of the past year shows no sign of abating. Unlike past recessions, consumers are increasingly aware that many job losses this time are permanent, not just temporary.

Not only were consumers more downbeat about their view of present economic conditions but they were markedly more pessimistic about the near future. The Conference Board's conclusion: "The economy will not be convincingly in a recovery phase until there is a marked improvement in consumers' spirits."

An economic revival also needs a growing manufacturing sector, and stronger consumer spending is impera-

tive to get factories humming again. Weak consumer buying at the end of last year left retail and wholesale inventories bulging. Efforts to reduce that overhang will depress factory orders and output in the first quarter.

Indeed, the trend of manufacturers' orders for durable goods is clearly down. New orders rose 1.5% in January, but that followed a 5.1% plunge in December, and the three-month average of orders has been declining since October. Moreover, the backlog of unfilled orders fell 0.3% in January, the fifth consecutive drop (chart). These trends imply little output strength in coming months.

Federal Reserve Board Chairman Alan Greenspan sounded a little more guarded on Feb. 25, when he put forth his forecast of a spring recovery during the second leg of his semiannual testimony to Congress on the conduct of monetary policy. The optimism in his remarks only one week earlier was far less qualified.

This time, Greenspan cautioned that recent positive signs "should not be exaggerated." He repeated his warning of a week earlier that, like last year, "the prospective incipient recovery could peter out." The chairman called the drop in consumer confidence "quite disturbing" and said that it "does not support the view that things are improving."

Although Greenspan said that it was too soon to tell if the recovery was on the way, he did say that he expected to see positive signs within weeks, not months. Translation: Barring a negative surprise in the data, the Fed is not likely to cut interest rates in the next few weeks, as it waits for more convincing evidence to emerge. The next big signpost: The February job report on Mar. 6.

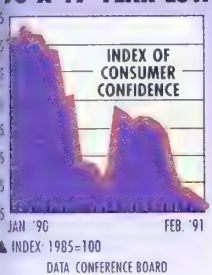
TRADE SOUNDS A SOUR NOTE

Clearly, domestic demand—especially by consumers—is the recovery's immediate roadblock. However, foreign trade also weighs heavily on the outlook. It was a big plus to economic growth in 1991, but trade prospects do not look as promising in 1992.

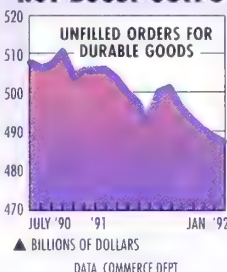
Indeed, foreign trade was a saving grace for the economy last year. Without the positive effects of a shrinking trade deficit, real gross domestic product would have declined slightly in 1991 instead of rising a bit.

Looking to 1992, America's insatiable thirst for imports is one problem. Also, export growth may not be very strong this year. That would remove a key prop-

CONFIDENCE DROPS TO A 17-YEAR LOW



WHY INDUSTRY MAY NOT BOOST OUTPUT



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ROOM AT THE TOP

SUDDENLY, IBM HAS A SHORTAGE OF HEIRS APPARENT

At IBM, the succession from one chief executive to another has always been as orderly as the passing of the crown from one generation of the British royal family to the next. Indeed, in its 78-year history, Big Blue has had just six chiefs: The legendary Tom Watson Sr. led the company for decades, and his son took on the job for the next 15 years. Succeeding CEOs all rose gracefully from president to become chairman. "Many American companies seem to have a tenure for the CEO of only four to five years," says Chairman John F. Akers. "That's not the way IBM has historically approached the challenge."

But now, just three years away from IBM's traditional retirement age of 60, Akers has no heir. His president, Jack D. Kuehler, is nearing retirement age himself. And during the past three months, Big Blue's chairman has accepted resignations from some of his highest-level executives, including the two

possible successors, C. Michael Armstrong (page 66) and George H. Conrades. In the past six years, 30 of the company's officers have turned in their Big Blue IDs, Akers says.

The chairman also says those departures are simply business as usual for executives who have spent decades at IBM. "Very often, individuals look to new adventures and new opportunities," Akers told BUSINESS WEEK. But the resignations come amid unparalleled upheaval at Big Blue: The company in 1991 posted its first annual net loss ever—\$2.8 billion. And it's trying to shed 20,000 workers this year, and perhaps an additional 20,000 next.

EMPTY DESKS. The goal: to turn the computer titan into a federation of more-or-less independent companies. The job is barely begun. And as Akers works away, he'll have to carry on without many of the executives who rose with him through the ranks.

The latest defections are a direct result of IBM's Thanksgiving reorganization. Conrades' resignation, for instance, comes after what analysts who follow IBM call a "public execution" in November, when he was sidelined from his post as No. 1 U.S. marketer. And the resignation of Armstrong, world trade chief to take the top slot at Hughes Aircraft Co. came after Akers warned him that he was unlikely to win the company's top job. "He always wanted to run his own show," Akers says of Armstrong. "When it became clear to me and therefore to him that he wasn't going to run IBM, I agreed to tell him. And I did that last fall."

The empty jobs at the top of the company—Akers says he isn't going to fill Armstrong's slot—are all the more striking because of earlier departures. In 1991, Carl J. Conti, ex-mainframe chief, retired. Last year, too, Edward E. Lente, a 30-year IBMer and president of

KEY DEPARTURES

Several key executives have left IBM, raising anew the question of who will succeed Chairman John Akers

1988

MIKE MAPLES

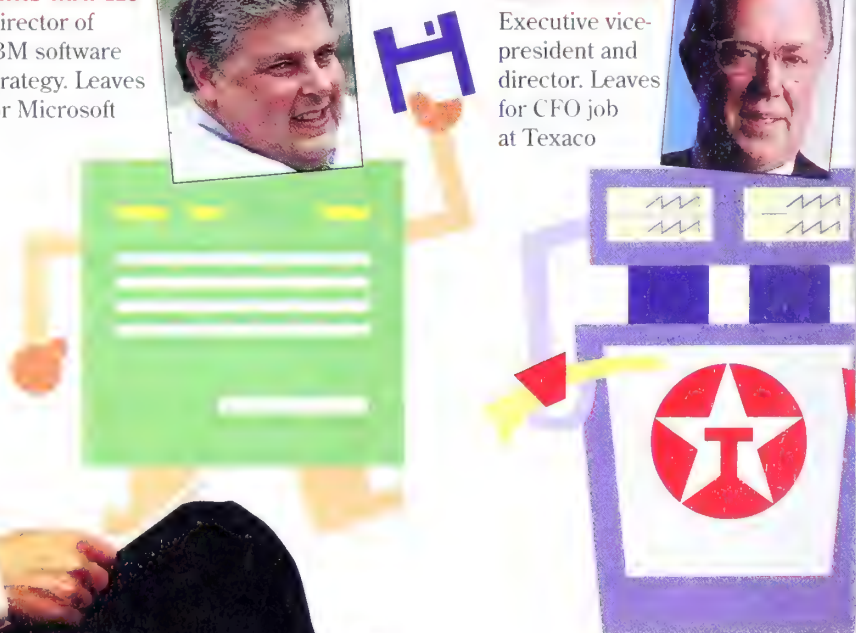
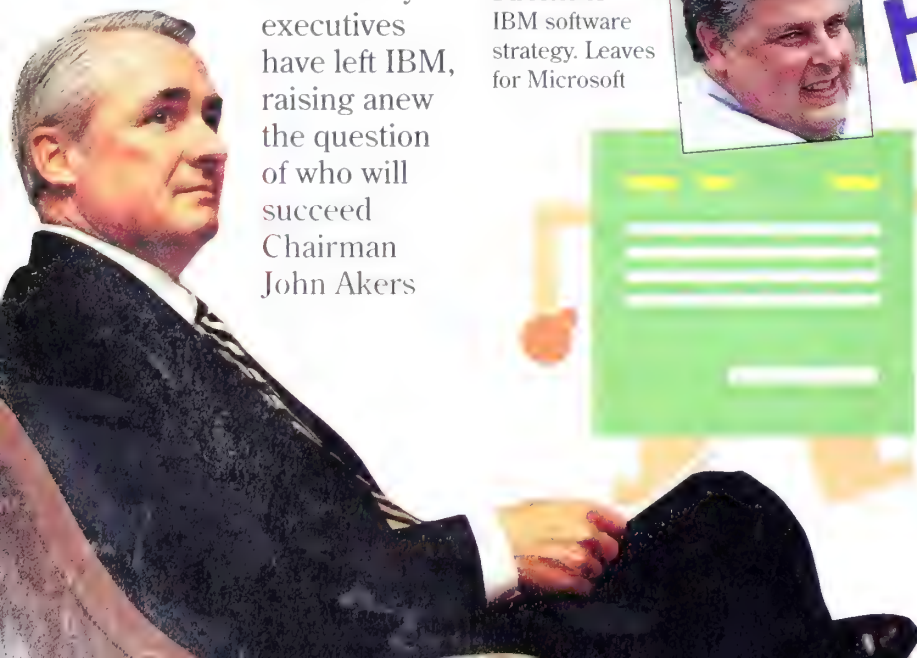
Director of IBM software strategy. Leaves for Microsoft



1988

ALLEN KROWE

Executive vice-president and director. Leaves for CFO job at Texaco



M's Asian operations, was hired away by Northern Telecom Ltd., the Canadian telecommunications-equipment maker. And there are more to come: Headhunting firms and executives at competing companies say they're aware of "hundreds" of IBM executives looking to move.

Many of those who have already left took advantage of the company's lucrative early-retirement options, launched in mid-decade as the company's sales and profit growth began to slow. Indeed, IBM has used the option to cut 60,000 people from its payrolls during the past six years. Along the way, the company lost a great deal of experience and talent.

IN THE DUMPER. But are things so bad now that IBMers are storming the exits? It is the new IBM, with its flattened structure, simply a place where old-style IBMers feel uncomfortable? "John Akers is investing in the next generation of executives, in their mid to late 40s," says Conrades. "It's important that everyone be pulling in harness." Ex-IBMers say they're not surprised to see the exodus of so much top talent. "Not everyone agrees with all the strategies and tactics that the company is taking," says John Morris, a 23-year veteran who left two years ago to become general manager of Dataquest/Ledgeway, a consulting company. "After a while, the fun goes out of it. You go through so many reorganizations that the objectives keep changing, and you get frustrated."

Akers' strategy mainly calls for the corporate equivalent of Ultra Slim-Fast. A slimmer company should do better in a market whose center of gravity is shifting from high-margin mainframes, IBM's core business, to networks of cheap, commodity-like desktop comput-

EXECUTIVE SUITE

It's hard to recall a single week when so many top execs took flight

Our seers and savants try to explain the stampede *Page 30*

Diller's exit gives Murdoch his cue to play mogul at Fox *Page 30*

Nick Nicholas' ouster may help Time Warner mesh *Page 31*

Miller leaves, but Chrysler's still asking: Who'll succeed Iacocca? *Page 32*

Behind Mike Armstrong's jumping ship at IBM for Hughes *Page 66*

ers. "The industry is in the dumper, and IBM is in the dumper," says Conrades. "We're playing in the all the fastest-growing areas. We have a [product] mix and [manufacturing] capacity problem. But we'll work that pig through the python. Akers is bound and determined to see that through."

And that may require new skills at the top. Akers envisions his new IBM as a "portfolio of companies," each measured by cash-flow and return-on-asset goals. To make that work, financial skills more than operational ones may be required of IBM executives, who in the past have been mostly salesmen and product managers. "I wouldn't be shocked if the next CEO is a financial guy," says Rick J. Martin, a computer analyst at First Chicago Corp. and an ex-IBMers himself.

The question of who—or what—IBM needs at the top clearly hasn't been decided. But it appears that the most likely candidates to step into Akers' shoes are

the executives running IBM's 14 business units. Many are vice-presidents in their mid-40s, such as M. Bernard Puckett, in charge of a software division, and Robert J. LaBant, who took over U.S. marketing from Conrades. "I think the people coming along now are all more highly skilled than the generations before that," Akers says. "That's been true all the way along."

TRANSFUSION? Other possibilities? Akers could choose to stay on as CEO beyond age 60—a retirement age he calls "not a hard-and-fast rule." That would give Akers more time to realize his far-reaching but inevitably painful reorganization. Having initiated the changes, he may be the right guy to see them through, which will likely entail closing factories and shedding tens of thousands of additional employees.

And if Akers truly wanted new blood, IBM could reach outside for a CEO—perhaps after the company had become more profitable and the work force had grown accustomed to the new structure. That would be unprecedented at IBM, which has a long tradition of internal promotion. Says Akers: "Absolutely expect to see people coming into the business from professional ranks outside."

Those outsiders will surely enter at a level well below CEO. Still, it's a welcome change for some insiders. Warns an ex-IBMers, with 17 years at the company: "Inbreeding is stifling [IBM's] ability to think any new thoughts. Akers ought to start hiring people that don't come from the IBM school." As Akers knows better than anyone else, no single person is going to fix IBM's problems overnight.

By John W. Verity in New York, with bureau reports

91 LUCENTE

President of
World
de Asia.
ves for
thern
com



1992

MIKE ARMSTRONG

Chairman IBM
World Trade.
Leaves for CEO
slot at Hughes



1992

GEORGE CONRADES

Sr. vice-president,
corporate market-
ing. Resigns under
pressure





Murdoch and Diller may have clashed over who would run Fox—or even own it. Diller says that last summer he tried to buy the studio and network

NOW PLAYING, RUPERT MURDOCH IN MOGUL

As Diller exits, the press lord will turn his attention to entertainment

Keith Rupert Murdoch has reinvented himself before. When his father died, he shelved his college career and political aspirations to take over the family's two small Australian newspapers. Gradually, Murdoch has left the running of his newspapers to others, devoting his energies instead to building News Corp. into a globe-girdling empire of television stations, magazines, and book publishers. Now, for his next act, Murdoch intends to become a Hollywood mogul.

That's a big change, even for Murdoch. But the abrupt Feb. 24 resignation of Barry Diller, who ran Murdoch's Fox Inc. studio and TV network, leaves him small choice—and it may be what he has wanted all along. Shifting the focus to Hollywood, he told *BUSINESS WEEK*, signals his preoccupation with the growth potential of the company's electronic media—which include not only the five-year-old Fox network but also a British satellite-delivered TV service. Murdoch also intends to take over the delicate task of picking hit movies. "Someone's got to have the final editing responsibility for picking the films," he says. "That's me now."

That's not to say the new Fox chairman will soon be roaming the set of *Home Alone 2*, the sequel to Fox's fabulously successful 1990 hit. A shy man by

nature, Murdoch has never been one for Hollywood glad-handing. And at least for now, he pledges his total faith in Joe Roth, the former movie director who has run the studio's film unit for three years and who is negotiating a contract extension. But Murdoch has become more involved with running Fox for much of the past eight months.

FOXY MOVE. Although both Murdoch and Diller firmly deny it, Hollywood types have been whispering that the two men weren't getting along. Diller is an often fiery executive who has been widely credited with the success of the Fox network. But recently, say Fox insiders, Diller chafed as Murdoch sat in on even the smallest meetings.

In fact, Diller and Murdoch may have clashed over who would run Fox—or even own it. Diller told *BW* that last summer he tried to buy Fox from Murdoch. What prompted such a bold move? "I think it was the fact that he turned 50, and he was tired of making billions for others," says Diller's friend, entertainment mogul David Geffen. Indeed, Diller's track record, dating from his days as head of both ABC network and Paramount Pictures Corp., is dotted with moneymaking successes. His next stop? He is said to be worth nearly \$100 million and, although he has been rumored to be looking at buying a piece of the

NBC network, Diller says he hasn't decided yet what to do.

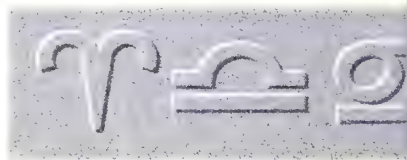
Murdoch can concentrate on Fox because his money worries have eased. News Corp., with its debt down to about \$7 billion from \$9 billion, has steadied its finances, despite having lost \$305 million in the fiscal year ended last June 30. In its most recent six months, the company earned \$189.3 million, an increase of 38% over the previous year.

News Corp.'s TV operations, which include the Fox network and seven U.S. stations, were the biggest winner. Thanks to better ratings and tighter cost controls, operating profits were up tenfold, to \$124 million. And British Sky Broadcasting Ltd., the satellite-delivery system, should turn profitable in mid-1992, after saddling News Corp. with \$600 million in losses. But the company's publications are still suffering from the general dearth of advertising, and Murdoch still must worry about a \$2.4 billion balloon payment on News Corp.'s debt due in 1994.

NOT YET NATIVE. Next on Murdoch's agenda is expanding the Fox network schedule, where added nights already have boosted ratings by 21%. He intends to offer seven full nights of prime-time programming, up from four now. He also wants to launch a cable channel.

Murdoch hasn't gone completely native, even though he owns a big house in Benedict Canyon and has been seen lately stepping out with fellow mogul Marvin Davis and former President Reagan. "I'll have to admit the guys who come to work without ties look darn comfortable," he muses. "But I think I'll keep my tie, thank you. Taking it off would be the best way I know to knock a couple points off my stock price."

By Ronald Grover in Los Angeles



RELAX, IT'S JUST NEPTUNE

Is it something in the water? Something to do with the stars? Maybe it's the ozone hole. Why, in the space of one week, did five top honchos at four corporations turn in their washroom Who can explain it?

Try Joan Quigley, the San Francisco astrologer and adviser to Nancy Reagan. She blames Neptune and Uranus. They're in a "lethal" alignment that impacts business and, lucky stars, comes around

TIME AND WARNER MAY NOW BECOME TIME WARNER

President Levin is expected to bridge the two cultures

Wendy Cole remembers her shock at getting a phone call in early February from Gerald M. Levin. The vice-chairman of Time Warner Inc. was calling Cole, a reporter for *Time* magazine, to compliment her on a documentary film she had directed. Cole had sent Levin a copy of the film to demonstrate that *Time's* print journalists were developing their talents in electronic media as well. "It's really surprising he called," says Cole.

That's putting it mildly. Even as he dined with Cole, Levin was enmeshed in a grim struggle for control of the world's largest communications company. On Feb. 20, after days of frantic maneuvering, Time Warner named Levin president and co-chief executive officer, replacing Nicholas J. Nicholas Jr. Time Warner executives and directors say Nicholas, whose contract called for him to become sole CEO in 1994, was ousted after clashing with the company's ailing co-CEO, Steven J. Ross.

Those who know him well say it's no surprise Levin could shift gears from boardroom intrigue to lauding the work of a junior staffer. Colleagues say the 42-year-old executive drew Ross to his side and vanquished rival Nicholas because of his ability to move deftly between roles: media executive, strategist, peacemaker, cheerleader. Most important, in stark contrast to Nicholas, Levin successfully spanned the distinct corporate cultures of Time and Warner. "He's the

bridge between the two," says Felix G. Rohatyn, who advised Time Warner on its recent alliance with Japan's Toshiba Corp. and C. Itoh & Co.

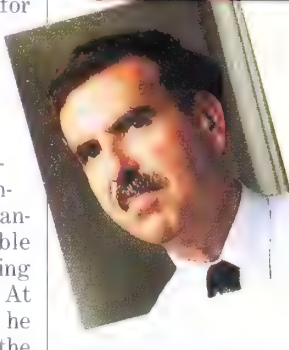
A TECHIE. Now, with Ross battling prostate cancer, media and entertainment mavens on both coasts are debating what imprint this brainy, low-key executive will put on Time Warner. Levin declined requests for an interview.

But several executives say his penchant for technology will push Time Warner further into such ventures as the 150-channel fiber-optic cable network it is installing in New York City. At Time Inc., where he always worked on the video side, Levin made his name as the builder of Home Box Office Inc.

Yet several executives say Levin's diplomatic style may also boost sagging morale among the company's publishing employees. Board member Henry Luce III opposed forcing out Nicholas. But he nevertheless supported Levin, in part because of his Time pedigree. Says Luce: "Jerry is a Time Inc. man, and I would hope he reflects that."

Editorial staffers think he does—far more than Nicholas did. In a welcome gesture, Levin recently told Time Warner's magazine publishers he would put the company's Time Inc. title back on its magazine and book-publishing unit. It had been changed to Time Warner Publishing. "This move is a real shot in the arm," says Publishing Chairman Reginald K. Brack Jr. Adds a senior *Time* correspondent: "He's been a better advocate for the editorial side than [Editor-in-Chief] Jason McManus."

Home Box Office will also have a strong champion in Levin. HBO has been struggling with the pay-cable industry's slowing rate of growth in recent years. But with Levin's enthusiastic backing, HBO Chairman Michael J. Fuchs is ex-



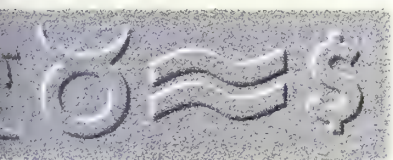
Levin is very high on the entertainment side of the business, and he isn't likely to tinker with Warner Brothers, which expects great things of *Mambo Kings*

panding into South America and Asia.

If Fuchs welcomes Levin's active support, Warner's entertainment moguls like that he stays out of their way. Nicholas once suggested selling the record division. But Levin gives free rein to Warner Music Chairman Robert J. Morgado. With stars such as Natalie Cole, Warner swept 10 of 12 major categories at the Grammy Awards on Feb. 25. And Levin will keep his hands off Warner Brothers Inc., the movie studio, which is hoping for a big '92 with films such as *Batman Returns* and *Mambo Kings*.

The stiffest test of Levin's dexterity will be Time Warner's complex finances. The company generated \$2.26 billion in cash flow in 1991, on revenues of \$12 billion. Christopher Dixon, a media analyst at PaineWebber Inc., predicts its cash flow will increase 8% in 1992. The debt-burdened company has breathed easier since it raised \$2.7 billion through a stock offering and \$1 billion more by selling a 12.5% stake in its entertainment assets to Toshiba and C. Itoh. And shareholders expect Levin to raise cash through another alliance, perhaps with France's Canal Plus.

But Time Warner still has \$8.7 billion



every 171 years. "These two planets never can give a great wallop," Quigley says. "We're in for a difficult time." Hold your crystals: It won't end till 1996.

What does the ancient book of *I Ching* say? After the ritual of throwing three coins six times, it points to hexagram 25, called "After the End." Its prophetic careers that are at their apex may go through a transition." Hmmm. And what does Marilyn Vos Savant—who, with an IQ of 228, is said to be the world's smartest woman? "It could just be the difficult times," she opines, "are making things jittery."

By Kathy Rebello in the Ozone

in debt to service. Levin will take Nicholas' place in talks with bankers over stretching out Time Warner's debt in exchange for higher rates. The bankers say they're comfortable with Levin and the company hopes to come to terms with them by this year's third quarter.

Easily Levin's biggest headache is dealing with the persistent rumors about Ross himself. Time Warner says he is

responding to treatment, which sources close to the 64-year-old Ross say includes chemotherapy. But there's some question about the true nature of his condition. Cancer specialists say chemotherapy is a highly unusual treatment for a cancer that is limited to the prostate. And one major shareholder says the timing of the shakeup was prompted by fears about Ross's health.

Whatever Ross's prognosis, Levin seems destined to have full control over Time Warner. But Ross can rest easy knowing that with Levin's devotion to technology and the power of video, the new Time Warner will look a lot like the company Ross has been dreaming of.

By Mark Landler in New York, with Ronald Grover in Los Angeles and Neel Goss in Tokyo

EXECUTIVE SUITE

AFTER IACocca, WHO?

Chrysler Vice-Chairman Miller's leaving still doesn't resolve the issue

Chrysler Vice-Chairman Robert S. Miller Jr. has just quit Motown for Wall Street. Does that mean President Robert A. Lutz is the undisputed front-runner to replace Lee A. Iacocca as chairman? No way. Says Miller: "The great management-succession race is still on."

The 67-year-old Iacocca has pledged to step down at the end of the year, but Miller's defection just means there's one less contender to succeed him. In a statement on Feb. 24, Iacocca confirmed that Miller, 50, was "one of several outstanding candidates under consideration." He added that the board's selection process goes on. Lutz isn't talking. But Wall Street is. "This has gone on way too long," says Charles T. Freeman, a portfolio manager at Wellington Management Co. in Boston, one of the top 15 holders of Chrysler shares. "We don't understand why this appointment hasn't already been made."

HANGING FIRE. One reason for the indecision may be that no one wants to rock the boat at a newly revitalized Chrysler Corp. Under Miller's direction, Chrysler in the past five months has rebuilt its balance sheet by raising \$1.4 billion through new share offerings and private placements. Lutz has spent his time completing development of the Jeep Grand Cherokee, which goes on sale in April, and the LH line of midsize sedans, including the Concorde, due out this fall. Meanwhile, cost-cutting kept Chrysler's fourth-quarter operating losses—\$30 million—far smaller than those of Ford Motor Co. or General Motors Corp.

But the succession issue keeps hanging over the company. Miller's announcement that he will join boutique in-

vestment banking firm James D. Wolfensohn Inc. follows the June, 1990, departure of Gerald Greenwald, another financial guy who for a long spell looked like Iacocca's heir. "Since the board apparently can't come up with a succession policy, people with other opportunities are going to take them, rather than wait and take a chance," says John A. Casesa, an analyst at Wertheim Schroder & Co.

Greenwald, now working at Wall Street's Dillon, Read & Co., may still have a shot at Chrysler's top job—particularly since the board has made it clear it is considering outside candidates. But Lutz, 60, has the strongest claim to the throne. A former Marine fighter pilot, he is the car enthusiast behind Chrysler's rash of new vehicles. After working in Europe for GM, Lutz served as an executive and director for both BMW and Ford. The multilingual Lutz has a vast reservoir of car knowledge. He's also a risk-



LUTZ HAS THE BEST CHANCE, BUT HE'S NO SHOO-IN

taker, although he stopped flying soon after crashing a helicopter near his home in Ann Arbor, Mich., last summer.

Lutz does have certain liabilities. Most pressing is his lack of financial savvy. "What Lutz cares about most is making great cars," says Casesa. "He would rather spend his time making sure the powertrain is perfect than poring over piece-cost analysis. He needs a partner who will do that." Of course, Chrysler could promote its well-regarded CFO, Jerome B. York, or go outside for a finance officer with a high profile among the banks, rating agencies, and credit markets. For the time being, Chrysler is leaving vacant the slot that Miller holds as vice-chairman.

Lutz's main problem in winning the top job, though, may be in getting Iacocca to vacate it. Some Chrysler managers say they're not convinced he'll actually leave at the end of the year—one has even gone so far as to put odds of just 60% on it. They question whether Iacocca will give up the

perks, his podium for commenting on national policy, and an employment contract that awards him 62,500 shares of Chrysler stock for every quarter he stays at the helm.

Wall Street figures Chrysler's board will have to settle the issue soon. "If they haven't decided on Bob [Lutz] by the time the annual shareholder meeting comes around in May, that would be a sign that Bob's not going to get it," says

John V. Kirnan of Kidder, Peabody & Co. The risk, of course, is that Lutz might decide to move on if he doesn't land the job. "I can't tell you how much stock would follow him out the door," says Joseph S. Philippi, auto analyst at Lehman Brothers. Worries of that sort may be enough to make the board clarify its succession plans soon—and then make sure Chairman Iacocca sticks to them.

By James B. Treece in Detroit



A '93 CONCORDE: LUTZ IS THE CHIEF CAR NUT

A 'LIVING HELL' IN INDIANA

When Whitehall moved its painkiller plant, it left a lot of pain in Elkhart

Joe and Patty Belew often felt the Whitehall Laboratories Inc. factory where they worked was almost like home. The Elkhart (Ind.) couple met here in 1980 and married five years ago. Last November, that home broke up. Whitehall, a subsidiary of American Home Products Corp., closed the plant, leaving behind 800 workers. Today, the Belwews subsist on \$248 a week in unemployment insurance. Neither has health insurance, and Patty is a diabetic. Despite sending out 100 résumés, Joe, 49, can't find work. They're using their Visa card to pay bills, including medical costs, but they have only \$500 left on their credit line. Says Joe: "We don't know what's going to happen."

HEAVY TOLL. Many folks in Ypsilanti, Mich., may feel the same way after General Motors Corp.'s Feb. 24 announcement that it would close the Willow Run plant there, laying off 4,014 workers. Unlike GM workers, though, the Whitehall employees may have some recourse in the courts. On Feb. 26, they filed a \$1 billion federal suit against AHP, alleging the company closed the plant and illegally shifted the jobs to Puerto Rico to enjoy federal tax breaks. But even if they win a court, the plant closing already has exacted a heavy human toll.

Gary Gilbert landed a job at Whitehall eight years ago after being laid off twice elsewhere. He mixed the ingredients for Anacin aspirin and made \$35,000 in a good year. But when AHP announced in September, 1990, that Whitehall would close, he started to drink heavily. "The last 18 months has been a living hell," he says. Unable to overcome depression or to control his drinking, Gilbert, 38, sought treatment. Although counseling helped, he's stuck with \$5,000 in medical bills he can't pay. His wife's father is paying the \$660 monthly mortgage. "I don't feel like a provider or a husband," he says.

A layoff often makes an already bad situation worse. Finess Smith and her husband filed for bankruptcy after they

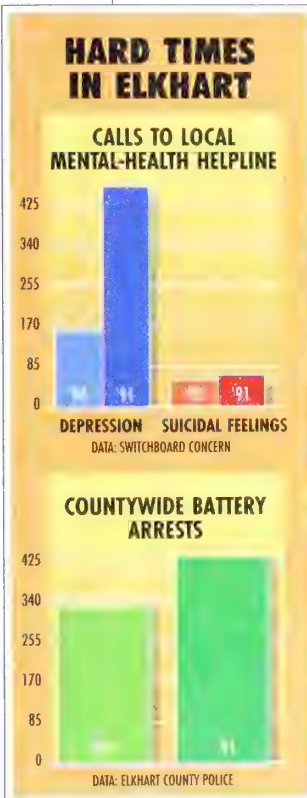
took a double hit: She lost her job at Whitehall just when her husband's child-support payments were increased by \$100 a week. Angie and Norm Roll's new marriage snapped after she lost her job. "I got really irritable," she admits, and they separated. But they've gotten back together, vowing not to allow Whitehall to ruin their marriage.

The plant closing carried a special sting because jobs at Whitehall seemed so secure. The factory produced such

pled through the community. Franklin Press Inc., a commercial printer, says it lost 20% of its sales when Whitehall left.

Those aren't the only statistics worth mentioning. As the recession struck Elkhart last year, the Elkhart Police Dept. and Indiana State Police say battery arrests jumped 33%, to 427. Patricia Barber, director of Switchboard Concern, a local suicide-prevention hotline, says depression calls spiked in 1991 (chart), partly because of the Whitehall closing. Last year, the agency received 65 calls from suicidal people, compared with 53 in 1990. Calls for depression jumped 184%, to 460.

VENGEFUL. More telling, perhaps, are the calls that weren't made. Ted Field, 56, grew morose after losing his job of 35 years. "He began to sleep a lot more," says Becci Mossey, his daughter. In early February, he died of a heart attack.



ANGIE AND NORM ROLL: HER LAYOFF NEARLY COST THEM THEIR MARRIAGE

popular drugs as Anacin, Advil, and Dristan, and the average tenure of the work force was more than 20 years. The Oil, Chemical & Atomic Workers International Union, which represented some 550 Whitehall workers, won successive raises, boosting the average wage to \$14 an hour. Most manufacturing jobs in Elkhart, a city of 45,000, pay half that.

The layoffs have rent Elkhart's social and economic fabric. Elkhart County's unemployment rate jumped to 7% in December from 6.2% in November, when the final 300 workers hit the streets. Fewer than half the laid-off workers have found jobs. And the economic impact of the Whitehall shutdown has rip-

"He'd never been sick," says Mossey. "I think losing his job killed him."

Former Whitehall workers hope to exact a measure of revenge in the courts. AHP maintains that it didn't violate U.S. or Puerto Rican laws that prohibit companies from closing plants on the mainland to take advantage of tax breaks in Puerto Rico. The Elkhart plant, an AHP executive says, was an inefficient operation closed during a restructuring. That's a common corporate explanation these days. Will Elkhart's post-shutdown experience become just as common? That's something the people of Ypsilanti will have to worry about.

By Kevin Kelly in Elkhart, Ind.



WHY THE UN-CANDIDATES COULD UNRAVEL

For Buchanan and Tsongas, it's do or die in Mar. 3 primaries

Just a few heady days ago, they were the "un-candidates," straight-talking insurgents who wowed the political Establishment with breakthroughs in New Hampshire. But for Republican Patrick J. Buchanan and Democrat Paul E. Tsongas, it's reality time. Battling fatigue, a cash crunch, and a crowded campaign calendar, the heroes of New Hampshire are now struggling for survival against better-organized rivals.

Will the un-candidates unravel? The stress cracks that have doomed many an underdog effort are starting to appear, as both men zig-zag across the country in a frantic search for campaign donors and media attention. Tsongas, whose cash need is greater than Buchanan's, is running the hardest. In recent days, he has raced from New Hampshire to fund-raisers in Tampa and New York City's Astoria district, where he put the touch on his fellow Greek-Americans (page 45).

'MINI-SUPER TUESDAY.' For Tsongas and Buchanan, the Mar. 3 primaries in Georgia and Maryland are more than a preview of the big Mar. 10 round of Southern contests. They may determine if either man is a serious Presidential con-

tender. "Mar. 3 is shaping up as a mini-Super Tuesday," says Democratic strategist Mark Siegel. "Bush hopes that his Southern fire wall will save him in Georgia. If Clinton isn't perceived as 'winning' Georgia, the confidence that he'll sweep the South vanishes. And Maryland is a do-or-die test for Tsongas. If he loses, he becomes just another one-shot regional candidate."

Consider Buchanan, the man with the golden lip. In New Hampshire, he had the benefit of a rotten economy and a month of door-to-door campaigning. His core support came from hard-right Republicans and Bush-bashing independents. To further tilt the odds, there was the support of the righter-than-thou *Manchester Union-Leader*.

In Dixie, it's another story. George

Bush partisans have organized Georgia to the hilt. "Our steering committee has everybody on it—Bob Dole supporter Jack Kemp supporters, even Pat Robertson's brother," notes Bush state campaign Chairman Fred Cooper. "A message was sent in New Hampshire. In Georgia, we're saying that continuing to send it can only damage the President."

To underscore that point, the White House is wheeling out such conservatives as Vice-President Dan Quayle and Housing Secretary Jack F. Kemp. Even House GOP Whip Newt Gingrich, a scathing critic of Bushian economics, is stumping Georgia for Bush.

The President himself plans two Georgia visits. And he has approved tough TV spots that attack Buchanan's opposition to the Persian Gulf war. "In a region that strongly supports the military, Buchanan is going to be hurt by his stance," says Tony Denny, Bush's southern regional coordinator.

MISSING MAGIC. Although a Feb. 24-27 poll shows Bush leading him by 63% to 27% in Georgia, Buchanan isn't awed by the firepower arrayed against him. He's blitzing the state in a shop-worn Convair turboprop, taking his campaign to Augusta, Atlanta's bustling suburbs, and the hill country pockets that are home to the "Bubba" vote.

But the magical inspiration of New Hampshire seems oddly missing. On his recent foray into the North Georgia hamlet of Ellijay, Buchanan forgot to scribble down an education speech in time for an appearance at a local school—and met Georgians reluctant to abandon Bush. Buchanan is "telling us what we want to hear," said Jack Barry, who runs an Atlanta investment



Only 50 supporters showed up for one \$500-a-plate Buchanan fund-raiser in an Atlanta suburb

counseling firm and made the trek to Ellijay to hear Buchanan's pitch. "Pat's an idealist who is trying to get us back to what made our country great," he concludes. As for a vote? "Just looking." Nor did Buchanan find the going easier when his caravan rolled into the prosperous Atlanta neighborhood of Buckhead. Only about 50 fans showed up for a \$500-a-plate fund-raiser. And at a lightly attended rally at a nearby hotel, staffers had to tell the faithful that the Buchanan-for-President buttons they wanted were "on order."

Despite his campaign's disorganization, Buchanan still can count on such artisans as Lyle Shira, a Delta Air Lines Inc. pilot and Coweta County GOP chairman. Shira is supporting Buchanan because the Republican Party has to stand for something other than cutting backroom deals with the Democrats in Congress. President Bush," Shira feels, "just doesn't have the convictions."

Up north in Maryland, un-Democrat Tsongas is finding the footing equally treacherous. Despite Tsongas' predictions of a strong Maryland showing—he leads Arkansas Governor Clinton 33% to 66% in a new poll—Clinton swooped into Baltimore on Feb. 22 and snagged endorsements from top congressional Democrats and black leaders. Since blacks make up 23% of the Maryland electorate, the raid seemed to strike at one of Tsongas' chief weaknesses: his probusiness pitch appeals far more to well-heeled suburbanites and independents than it does to traditional Democrats.

LOOSE CANNON. A border state, Maryland has upscale demographics that make it a lot more like Connecticut than its Southern cousins. That should provide fertile ground for Tsonganomics, but the former Massachusetts senator has been listless in campaign appearances in Annapolis and the Washington suburbs. And an unexpected endorsement from William Donald Schaefer, the state's controversial governor, is a mixed blessing. "Schaefer's popularity is in the 20s, and he's a loose cannon to boot," says a veteran state pol. "Tsongas will have to keep him quiet or suffer the backlash."

The pros' predictions for Georgia and Maryland? Bush wins big in the Peach State. Clinton also scores. But Tsongas and a Medal-of-Honor-brandishing Bob Kerrey, fresh from his victory in the Feb. 25 South Dakota primary, cut into his tally. And in Maryland, Tsongas floods to a narrow victory that doesn't quite give him the national lift he seeks. So the pundits say. But then, who's crazy enough to listen to pundits in this topsy-turvy election year?

By Lee Walczak in Bethesda, Md., and Chuck Hawkins in Ellijay, Ga.

Commentary/by Howard Gleckman

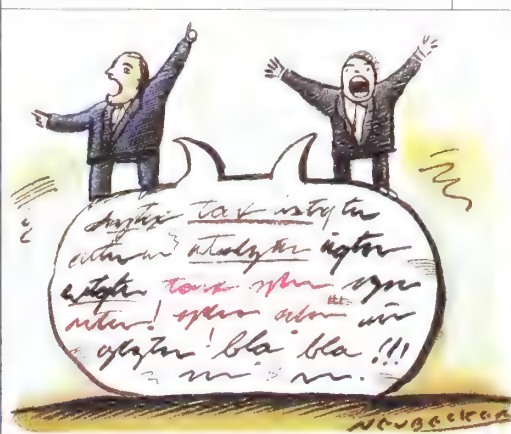
WASHINGTON'S BRAWL OVER TAXES IS MOSTLY SHOW BIZ

The rhetoric coming out of Washington these days is downright torrid. A barnstorming President Bush warns voters that the Democrats plan to "raise your taxes" and, in words eerily reminiscent of his "read my lips" vow, threatens to veto any legislation that increases tax rates. Congressional Democrats, meanwhile, puff themselves up and charge that the President has abandoned the middle class in favor of wealthy Americans. "He showers the rich with tax breaks of tens of thousands of dollars, while the middle class takes a bath," says House Ways & Means Committee

cy? Craven politics. The White House, harassed by primary challenger Patrick J. Buchanan, wants to portray Bush as tough on taxes. So, when Congress sends him a bill that includes a tax hike, the President, with great fanfare, will veto it. The White House hopes that will stifle Buchanan's criticism of Bush as a "tax and spend" President, and put the heat back on the Democrats. "This one," says one Bush strategist, "is a winner."

But Democrats are betting the White House strategy is wrong. So they're in the process of loading their tax bill with all sorts of goodies, even including a modest stab at health care reform (page 45). And they're ready to accuse Bush, after his veto, of killing a tax cut for average working Americans to protect his rich pals. Congressional Democrats believe that tax fairness was a powerful political message in 1990, and they are convinced it will remain so in 1992.

ROUND TWO. All hyperbole aside, this tax debate has the same hollow ring as last year's pitched battle over affirmative action. There was virtually no difference between the "compromise"



Chairman Dan Rostenkowski (D-Ill.).

Treasury Secretary Nicholas F. Brady describes the conflict as a "clash of values" between Democrats and Republicans. It is no such thing. There's barely a dime's worth of difference between these competing "economic recovery" plans. Both would provide modest incentives for capital investment. Both would give a few bucks to the real estate industry.

FANFARE. The Democrats want to cut taxes a bit for the middle class. In his State of the Union address, Bush also proposed a modest tax cut for workers. The only difference: Democrats would raise rates on the wealthy, while the President would tax the rich less directly, with proposals such as increased levies on annuities and higher medicare premiums for wealthy retirees. Lately, Bush has wandered away from both the tax cut and the offsetting revenue-raisers. But no matter. Neither plan has a real impact on the overall tax burden or the economy.

So why are the two sides insisting that they're poles apart on fiscal poli-

1991 Civil Rights Act that Bush signed and the Democratic proposal that he denounced as a "quota bill." But the White House felt that the running battle with Congress served the President's political interests. Washington is playing the same game today. All thought of passing a bill that might help the economy has long since been lost. The only goal now is finding a message that works at the polls.

Some politicians have their doubts about the strategy. Democratic Presidential candidate Paul E. Tsongas has publicly blasted both bills. And privately, a few strategists in the Administration and on Capitol Hill worry that their game of fiscal chicken will backfire. A White House aide frets that the expected veto of a middle-class tax cut "may not be an easy sell" to voters.

Then there are those lawmakers who fear that a backlash against Washington gamesmanship will hurt both Bush and Congress come November. "What worries me," says one House Democrat, "is that voters are going to get us all." He may be right.

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Who knows. It just might be the one time in your financial life you were saved by the bell.



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TINA YALEN WON A RAISE BUT HAD TO "KEEP A LOW PROFILE TO MINIMIZE RESENTMENT"

MERIT PAY FOR TEACHERS MAY NOT HAVE MUCH MERIT

Although a favorite reform with the candidates, it's getting low marks

When it comes to education reform, some Republicans and Democrats don't disagree much. President Bush and Democratic challengers Paul E. Tsongas and Arkansas Governor Bill Clinton want to inject such free-market notions as competition into the nation's schools. One pet idea all three embrace: "merit pay," a scheme that bases teachers' salaries on classroom performance.

To skeptics, the politicians' positions are cause for concern. They say merit pay is one idea from the real world that flunks in academia. Its funding often is uncertain. It has few advocates beyond the teachers who receive the bonuses. And merit pay is foreign to the egalitarian teaching culture. "It engenders resentment," says an American Federation of Teachers spokesman.

The Presidential contenders need look no further than Washington neighbor Fairfax County, Va., to see why incentive-pay schemes are no panacea. County

school officials there had to take drastic action when they ran into problems with their \$1.2 billion budget. On Feb. 18, the board suspended merit payments due 2,100 of the system's 9,000 teachers rather than lay off 374 of them.

MIXED RESULTS. Other school districts are taking a critical look at merit-pay programs, too. When North Carolina's budget woes forced it to make tough choices in 1991, it slashed merit pay. And despite repeated requests by state education officials in Ohio, the legislature has never ponied up cash for a full-

fledged program there. "The problem has always been funding... and evaluation systems for merit pay," says Ohio Assistant Superintendent Robert Moore.

Merit-pay advocates say that improving the teaching corps is an important first step to pulling the country's schools out of their tailspin. Yet in states such as Tennessee and Utah, which have longstanding merit-pay programs, the results are, at best, mixed. Tennessee officials don't link any rise in student test scores to merit pay. In Utah, Ann W. Hart, an associate dean in the University of Utah's graduate school of education, says instruction and curriculum have improved, but "there's no evidence that merit pay has an impact on kids."

There's another problem, too. Merit pay in Utah, as it often is elsewhere, is part of a "career ladder" program that rewards teachers for self-improvement, not improved student performance. But the \$41 million program may not encourage teachers to brush up their skills. "Teachers are not counting on it because it's a special appropriation every year," Hart says.

CULTURE CLASH. In other states, there are complaints about how merit pay is awarded. A North Carolina pilot project had outsiders sit in on classes three times a year to review teachers. W. Glenn Keever, a spokesman for the state's Public Instruction Dept., says teachers complained that reviews were subjective and bad teachers just cleaned up their act during the evaluation.

Perhaps the biggest obstacle, though, is the conflict between merit pay and the teaching culture, which often depends on teamwork. By producing a less egalitarian pay scale, merit raises can deeply divide teaching staffs, as happened in Fairfax County. "We were told from the start to keep a low profile to minimize resentment," says Fairfax County social studies teacher Tina Yalen.

To get around merit pay's problems, some states are opting to reward improved performance for whole schools with lump sums that can be used for nearly any purpose.

The bottom line? The Presidential candidates really want to help cure the nation's ailing schools, they may have to do a little more homework.

By Christina Del Valle in Washington, with Sandra D. Atchison in Denver, Walecia Konrad in Atlanta, and bureau reports

MERIT PAY: BARELY MAKING THE GRADE

ARIZONA In 1985, the state put \$100,000 into its program. Current funding is \$21.1 million

MISSOURI Despite a state financial crunch, the state's career-ladder program funding will reach almost \$19 million this year, up from \$2.6 million in 1986

NORTH CAROLINA The state launched a career-ladder system in 1984 with \$12 million. That was a bust. Now, it puts \$38 million into a bonus pool

OHIO In 1990, the state put \$2 million into a one-year pilot program, then ended it because of a budget crunch

TENNESSEE The state spends \$100 million on its career-ladder program, up from \$62 million in 1985. But it hasn't measured the effect on students

TEXAS Its career-ladder program pulled in \$300 million in state funds this year

UTAH Its career-ladder scheme grew from \$15.2 million in 1984 to \$41 million

DATA: SOUTHERN REGIONAL EDUCATION BOARD, BW

THE MAN WHO MOPPED UP THE MILKEN MESS

Now Judge Pollack's learned hand ended the haggling

When the Securities & Exchange Commission filed its massive securities fraud suit against Michael R. Milken in 1988, his lawyers tried to get U.S. Judge Milton Pollack off the case. They accused Pollack of conflict of interest, pointing out that his wife stood to make \$30 million in a leveraged buyout of a family retail chain financed by Milken employer Drexel Burnham Lambert Inc. When Pollack refused to step aside, Milken's lawyers took their appeal all the way to the U.S. Supreme Court.

The high court refused to take the case, and Pollack stayed put. Now, Milken's lawyers are set to announce the final details in a \$1.3 billion settlement of 9,000 civil claims filed by the Federal Deposit Insurance Corp. and investors against the high felon of junk finance. The pact, which marks the end of the Drexel saga, forces Milken to put in \$600 million. That's on top of the \$400 million he had already agreed to pay to a restitution fund as part of his plea bargain with the federal government, though it still leaves him with hundreds of millions in assets. The remaining \$400 million will come from Drexel-related investment partnerships and insurers. Before signing off, Pollack hired a former investment banker to make sure Milken was good for his share.

TOUR DE FORCE. Nearly everyone involved in the case had reason to settle. Milken, for one, surely wanted to avoid a publicity-heavy trial. But it was Pollack, more than anyone else, who finally got the deal done. His strategy: unorthodox maneuvering and some strong-arming. "He can stare you down," says Ira M. Millstein, a partner at the New York law firm of Weil, Gotshal & Manges, who negotiated the deal for Drexel.

The 85-year-old judge says settling the Milken cases is the "tour de force" of a career that includes 38 years as a trial lawyer and 25 years as a judge on the U.S. District Court in Manhattan. His time on the bench, plus his experience in securities law, allowed him to wrap things up quickly, say lawyers involved. Pollack didn't have to learn the Drexel business," says Millstein. "He knew it." Indeed, by the time the SEC brought its case before Pollack, he was everything the Milken camp feared in a judge. Pollack was regarded as a forceful jurist who tended to favor the government in

securities fraud cases. Worse, Milken's top lawyer, Arthur L. Liman, had tangled with Pollack before. In the late 1970s, after a protracted takeover battle between Chris-Craft Industries and Piper Aircraft Corp., Pollack awarded Liman's client, Chris-Craft, a disappointing \$3 million. Liman persuaded an appeals court to up the award to \$36 million, but the Supreme Court agreed with Pollack and reversed the decision.

APRIL FOOL. Pollack's angling to settle the Milken claims began a year ago, when he seized control of the Drexel bankruptcy. He quickened the pace of the settlement talks by threatening to turn the bankruptcy reorganization into a liquidation. By May, Pollack had gotten the army of bankruptcy lawyers to agree to a tentative pact. A key component of the deal was an injunction barring future Drexel-related securities fraud suits by private individuals against Milken, former Drexel employees with partnership stakes, and others.

There was one hitch: To get the benefit of the injunction, Milken and the oth-

er defendants had to settle the civil suits before Drexel's plan was confirmed. A scheduled Mar. 5 confirmation hearing on the Drexel plan gave Pollack the opening he needed to push a civil settlement. As an added incentive, he set an Apr. 1 trial date for one case—months earlier than the lawyers wanted.

Pollack's most successful strategy may have been his most unorthodox. Normally, judges are barred from talking about cases with some of the participating lawyers and not others. Here, Pollack got all the lawyers to agree from the start that his door would always be open for private chats, as well as for resolving impasses. The move not only helped Pollack understand everyone's problems but also turned the judge into a key player. Liman observes: "He was indispensable."

Some parties charge that Pollack pushed a deal that favors Milken and his inner circle. "Everyone who is not in the top group is incensed by this whole process," says one defendant. Still, the litigation has been side-stepped. Now, Milken is turning his attention to getting out of jail. A hearing on reducing his 10-year sentence could come this spring. Milken partisans are hoping that the billion-dollar pact will help convince the sentencing judge that the financier deserves a break. Pollack's imprimatur on the deal won't hurt.

By Michele Galen in New York



**POLLACK: DEFT STRATEGY
—AND STRONG-ARMING**

EXECUTIVE PAY

GRAEF CRYSTAL: IS HE PAUL REVERE OR BENEDICT ARNOLD?

The executive-pay critic is under a furious attack from boardrooms

Balding, stocky, and disheveled, Graef S. Crystal hardly seems cut out for celebrity. Yet through his appearances on *60 Minutes*, *ABC News Nightline*, and *Good Morning America*, the gadfly and guru of executive pay is getting more publicity these days than some who would be President.

A witty business-school professor, "Bud" Crystal is also incurring the wrath of a seemingly endless parade of chief executives, corporate lawyers, and pay consultants. The heat he's generating helped get him fired on Feb. 24 from

his job as columnist for *Financial World* magazine. Moans Crystal: "I sense that people are starting to play hardball, and they are totally unforgiving about anything I do."

'FEEDING FRENZY.' Why the furor? Because in an election-year recession, executive pay suddenly has become a hot political issue—in part because of Crystal's agitation. It's an ironic turnabout for a consultant who for years strode into boardrooms to justify ever-higher compensation for the boss.

Crystal, 57, jokes about his "crossing

the street," but few others are laughing. Some go so far as to blame him for the media's widespread coverage of the issue, for pending congressional legislation to limit executive pay, and for a Securities & Exchange Commission crackdown on pay practices at public companies. "He's an egomaniac," grouses Louis J. Brindisi Jr., a pay consultant in New York. "He has created a feeding frenzy, and he has opened the floodgates for the lunatics to get involved in executive pay."

Even big-name lawyers Martin Lipton, of Wachtell, Lipton, Rosen & Katz, and Ira M. Millstein, of Weil, Gotshal & Manges, have joined the harsh chorus. Lipton has circulated a paper on compensation that he says "exposes the fallacies" of the consultant's conclusions. Millstein has charged that Crystal unfairly singled out client Champion International Corp. Chief Executive Andrew C. Sigler as an overpaid executive. Rather than respond to Millstein's complaint privately, as the lawyer hoped, Crystal retorted that he would report on it in his newsletter. "Bud's contentious," says Millstein. "He decided to make this the cause célèbre of the century."

UNFAZED. What makes the adjunct professor at the University of California at Berkeley so threatening is his intimate knowledge of pay practices and the stridency he brings to the debate. The latest brouhaha over his dismissal at *Financial World* was spurred partly by complaints from Phelps Dodge Corp. Chief Executive Douglas C. Yearley. He was miffed when Crystal overstated his pay last year by \$3 million. Crystal concedes he mistakenly credited the executive with 59,000 shares of restricted stock instead of the 5,900 Yearley received. Yearley hired former *New York Times* chief counsel James Goodale to demand a retraction from *Financial World*. The magazine complied. Crystal also publicly apologized to Yearley at a mid-January conference at Northwestern University.

Yet the incident, confirms FW, eventually led to Crystal's ouster. "Bud does things that would be considered inflammatory, and it probably didn't help his cause," says Douglas A. McIntyre, president of *Financial World*. It's not Crystal's first run-in at a magazine. Only last June, he quit a similar job at *Fortune* after alleging editorial interference over his conclusion that Steven J. Ross, CEO of *Fortune's* parent, Time Warner Inc., is overpaid.

Crystal promises no letup. He's already booked for Larry King's radio show and expects to address the Senate Finance Committee. They will be appearances that can only add to his notoriety.

By John A. Byrne in New York

SPORTS MARKETING

TO MARKETERS, KRISTI YAMAGUCHI ISN'T AS GOOD AS GOLD

Are they shying away because of her Japanese surname and looks?

Kristi Yamaguchi is red-hot. She's lithe, pretty, and telegenic. Her performance in women's figure skating, the glamour event of the 1992 Winter Olympics, won her the gold medal—the first for an American since Dorothy Hamill wowed the judges in 1976. So savvy consumer-products companies must be lining up to pay the 20-year-old Northern Californian big bucks to endorse their wares, right?

Not exactly. "Kristi has no offers yet," says her agent, Kevin Albrecht of International Management Group. He has drawn up a list of goods that he thinks are right for her: "Soft drinks, automotives, and because of her attractiveness, beauty products."

TOO ETHNIC? So far, though, that's all just paperwork. Coke and Pepsi have had preliminary talks with Albrecht, but neither has made an offer. And other companies are not interested at all. Nutrasweet, which used Hamill as a spokeswoman for five years, hired Yamaguchi for a month-long skating tour in 1990 but won't be using her as a spokeswoman.

Is celebrity marketing passé? Hardly. Rather, companies may be shying away from Yamaguchi because of her ethnic heritage: She was born in the U.S., as were her folks, but her surname and looks are Japanese. Says Jay Coleman, president of Entertainment Marketing & Communications International, which recently signed Michael Jackson to his third Pepsi campaign: "The environment to 'max out' on her earning potential is not enhanced by the present mood of the country toward Japan."

Albrecht and the companies he has

talked to say Yamaguchi's ethnic background hasn't come up. But it's worth noting that the companies she already has deals with—Kellogg, Ray Ban, and Evian bottled water—don't plan to make much of a fuss over her gold medal. Kellogg will do the most: It's picturing the skater on a Special K cereal box. Ray Ban, a division of Bausch & Lomb, has a two-year contract with Yamaguchi,

but is using Olympic sprinter Jackie Joyner Kersee and swimmer Matt Biondi, among others, in its TV ads.

NOT FEATURED. Evian, the Paris-based mineral-water company, won't make many demands on Yamaguchi either. She'll appear at some high schools and in advertisements with other athletes. Who will star in Evian's print ads? "Not Kristi," says Evian's marketing director, Edward J. Slade. The print campaign will feature Biondi and Wendy Williams, member of the Olympic diving team.

Pepsi, likewise, is more excited about Ray Le Blanc, star goalie for the U.S. hockey team, which didn't win a medal. The company will help throw a welcome home party in Indianapolis for Le Blanc, who once worked in Pepsi plant.

Yamaguchi will appear in local TV ads for Campbell Soup Co. And she and her mom, Carole, are prominently featured in a Kraft General Foods Inc. recipe book. But in the marketing Olympics she's no threat to Michael Jordan. It's curious: Both Hamill and Peggy Fleming became promotional mainstays after they skated their way to Olympic gold. Yamaguchi, for some reason, may never even get the chance.

By Laura Zinn in New York



KRISTI'S HANDFUL OF DEALS

Company	Product
KELLOGG	Special K cereal
EVIAN	Bottled water
BAUSCH & LOMB	Ray Bans
CAMPBELL SOUP	Various soups
KRAFT	Various foods

DATA: COMPANY REPORTS

Skylark

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capture it on
canvas.

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power fuel-injected 3300 V6.

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that adjusts to varying speeds.

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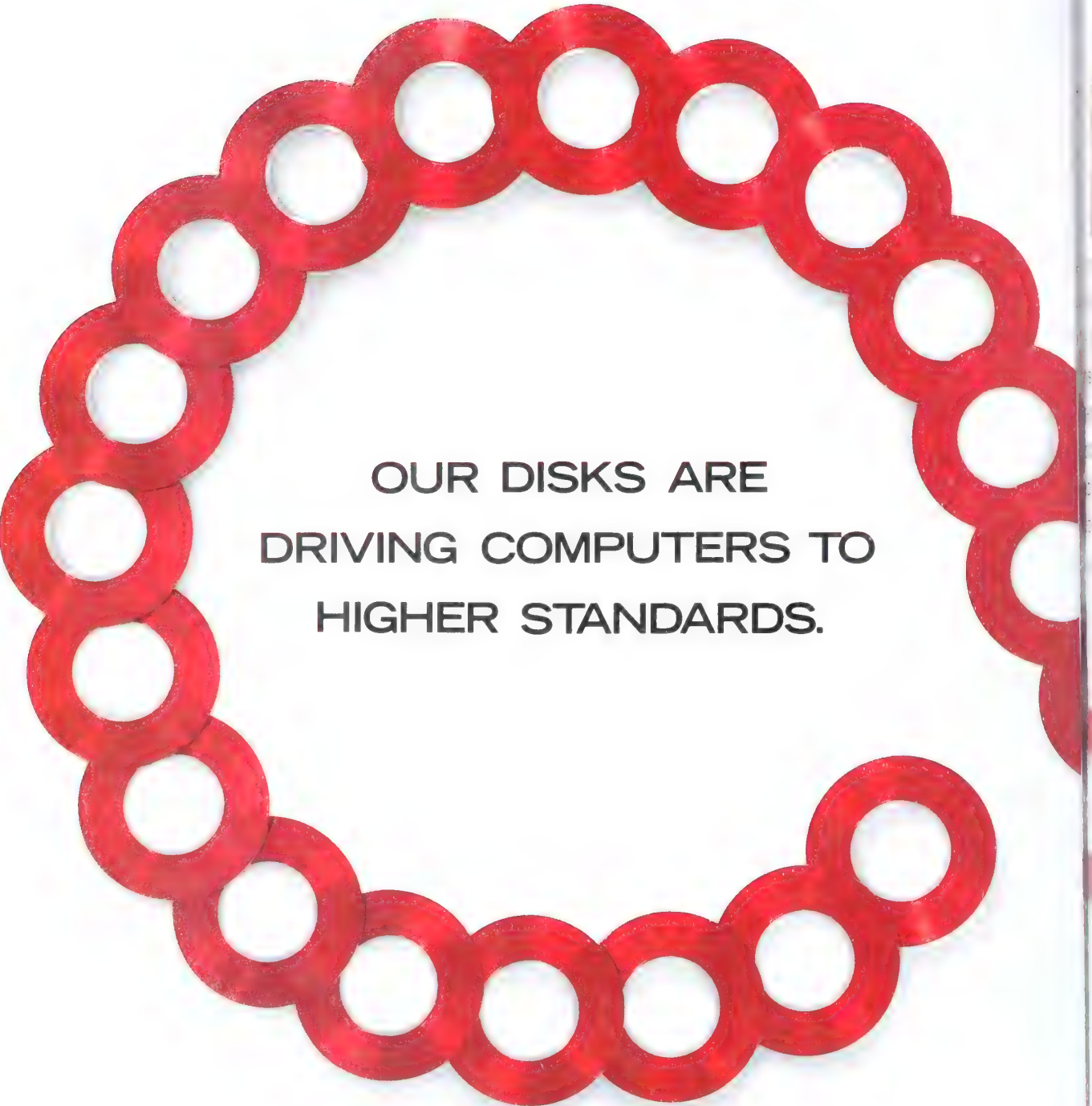
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products in businesses all over
America.

∞
FUJITSU

COMPUTERS, COMMUNICATIONS, MICROELECTRONICS

In Business This Week

EDITED BY HARRIS COLLINGWOOD

SPLASHING RED INK

General Motors' Feb. 24 announcement of the largest-ever annual loss for a U.S. corporation raises a question: What other companies have previously posted monster losses? Here's a look at the 10 worst yearly losses in U.S. corporate history:

COMPANY	YEAR	LOSS IN BILLIONS
GENERAL MOTORS	'91	\$4.452
TEXACO	'87	4.407
LTV	'86	3.251
LTV	'88	3.153
IBM	'91	2.827
CONTINENTAL AIR	'90	2.343
FORD	'91	2.258
GENERAL MOTORS	'90	1.986
FIRST REPUBLICBANK	'88	1.942
USX	'86	1.833

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.

IS ANOTHER COLD WAR ENDING?

► The conventional wisdom is that in an election year, President Bush wouldn't dare lift the U.S. embargo on trade with Vietnam. But U.S. businesses lobbying to end the ban believe they could get their wish by early summer.

Why? With Europeans and Asians bidding eagerly for Vietnamese business, Hanoi is warning U.S. companies that the contracts it has earmarked for them won't wait forever. Moreover, GOP challenger Patrick Buchanan doesn't oppose an end to the ban. One stumbling block: disputes with Vietnam over accounting for U.S. servicemen still missing in action.

'DON'T GET UP, JUST BUY'

► Great news for couch potatoes. TV Answer of Reston, Va., planned to announce on Feb. 27 that computer giant

Hewlett-Packard will produce and market hardware that will allow consumers to shop and bank using a television remote-control device.

HP says it will make a minimum of 1.5 million electronic boxes within a year after the Federal Communications Commission grants licenses to local interactive-TV operators. HP also plans to market the VCR-sized devices at a retail price below \$700. TV Answer, which develops and tests interactive-TV technology, predicts that homeowners could see a commercial interactive-TV system by early 1993.

LLOYD'S OF LONDON IS UNDER SIEGE

► Fabled Lloyd's of London finds itself under attack on many fronts. A dozen investors in the underwriting syndicates that make up Lloyd's have filed suits trying to stop it from tapping into their capital to cover \$4 billion in losses racked up over the past three years. In the suits, many individual investors charge that Lloyd's favored insiders, such as brokers and underwriters, who kept the best business to themselves.

The disputes could undermine Lloyd's ability to raise capital and take on new risks. Unless an investigation by an independent regulator, Sir David Walker, clears the air, the government may be forced to

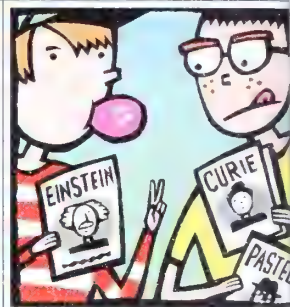
'TRADE YOU TWO EINSTEINS FOR A TESLA'

You've heard variations on the lament: "My kid knows the batting averages of every baseball player in the country. If only he'd pay that much attention to his schoolwork."

Try getting him a set of scientist trading cards. Yep. They look just like baseball cards, but instead of batting averages they list degrees, grants, publications, and hobbies. There's the PhD whose computer is learning to recognize what he says (He likes skiing.) And the chemist who studies elephant urine to learn what attracts male to female. (She's a scuba diver.)

Since August, the Oregon Graduate Institute of Science & Technology has given out about 700 each of cards featuring nine faculty members. Requests have poured in from 26 states and three countries.

O. K., it may not bring science scores up to the levels of the Koreans or the Taiwanese. But it's a start.



step in to restore investor confidence. And Lloyd's may have to go to private banks or outside investors to head off a liquidity squeeze.

SAKS: A BOLD MOVE IN TOUGH TIMES

Saks Fifth Avenue Chairman Melvin Jacobs expects an economic rebound later this year, but he's not waiting for it. Despite the worst retail environment in decades, Saks is expanding operations to get a jump on its weakened competitors. The New York retailer, flush with a \$300 million equity infusion from Saudi parent

Investcorp, says it is going to pay down \$150 million in debt, open as many as half a dozen new stores, and renovate several more.

Considering the plight of Saks's rivals, the company's announcement caught many in the retail community off guard. "It's a bit of a shocker," says Gilbert Harrison, retail investment banker. But others applauded the plan, especially since Saks, backed by Investcorp, appears to have the financial wherewithal to carry out its strategy.

TAKING BIG BERTHA PUBLIC

► Former Burlington Industries President Ely Callaway, a vintner and golf-club manufacturer, is going public. Callaway Golf, whose most popular product is the high-priced, oversized Big Bertha driver, has more than doubled its sales in each of the last four years. Revenues in 1991 totaled \$54 million. Callaway expects to raise more than \$40 million by going public. He plans to use some of the proceeds to expand the Big Bertha line and launch an overseas sales drive. The stock's ticker symbol: ELY, of course.

BY GARY BASEMAN
ILLUSTRATION BY GARY BASEMAN



TSONGAS HAS LOTS OF LOOKERS —BUT NOT ENOUGH BUYERS

President Bush can jet off to California and return with a fresh \$2 million in his campaign war chest. And the checks roll in to Arkansas Governor Bill Clinton's well-oiled money machine. But Paul E. Tsongas is still the Avis of campaigns: He has to try harder just to keep rolling.

Although donations picked up after the former senator from Massachusetts won the New Hampshire primary, Tsongas' campaign is still strapped for cash as the Mar. 10 Super Tuesday primaries loom (page 34). Fat cats have been slow to open their wallets despite Tsongas' probusiness stance. Many will question his electability.

Potential donors are kicking the tires, though. Texas entrepreneur H. Ross Perot says he is intrigued by Tsongas but has yet to make a contribution. New York investment banker Felix Rohatyn says he likes Tsongas' message, but adds: "I like Bill Clinton, too, and I've met him."

NOT-SO-CHEAP THRILL. A few of Chicago's rich and curious came to check out Tsongas over coffee on Feb. 24 at the home of Vigoro Chairman Joseph P. Sullivan and his wife, Jeanne. The 33 guests each kicked in \$1,000, but, again, they came more for the novelty than out of support. William Wolf, who advises Chicago's wealthy Crown family, says he stopped by because he's a Republican unhappy with Bush's economic policies. But he left unconvinced: Tsongas "just doesn't have a way of captivating a crowd."

The candidate's quirky charm has played better to smaller givers. On Feb. 22, a crowd of supporters turned out at Boston's Park Plaza Hotel to toss \$25 apiece into shoeboxes. Total take: \$100,000. The nation's Greek community, still smarting from Michael S. Dukakis' 1988 crashing, has belatedly rallied to Tsongas, chipping in almost \$500,000 since New Hampshire. And on one recent day, Tsongas collected \$114,000 in mailed-in contributions. Many of these small gifts come from contributors excited by reading Tsongas' 86-page *Call to Economic Arms*.

Like Tsongas, Republican insurgent Patrick J. Buchanan has turned to unconventional fund-raising. While business, bearing retribution from the Bush Administration, has jettisoned Buchanan, the pugnacious conservative has a secret weapon. Right-wing mailing lists have generated almost \$1 million, more than half of his total take. "Unlike George Bush, we are appealing to angry people hard hit by the recession," says Finance Director Scott E. Mackenzie.

Still, \$1 million is peanuts at this point. "You get into horrendous problems of having to raise \$100,000 a day just to keep going," says Terry McAuliffe, finance director of Richard L. Gephardt's 1988 Presidential campaign.

Tsongas, who needs at least \$2 million by Mar. 10, has hired Los Angeles developer Steven Moses to coordinate his California efforts. Supporters are also planning a fund-raiser at a popular Wall Street watering hole on Mar. 3—a modest one, since money isn't the only motive. "We're more interested in getting Wall Street people involved in knowing him," says

organizer Stephen Paluszek, executive vice-president of M. A. Schapiro, an investment firm. Clinton, meanwhile, easily raked in \$700,000 at a Feb. 10 New York fund-raiser.

It's a little late for getting to know potential donors, but Tsongas has little choice. "Paul's message is manna from heaven for business," says supporter George N. Hatsopoulos, president of Thermo Electron Corp. in Waltham, Mass. But, he adds, "the high-tech community looks with suspicion at any politician, especially Democrats." New Hampshire gave Tsongas credibility. But unless he can quickly turn that win into cash, he'll need a miracle to weather the rigors of March.

By Douglas Harbrecht in Washington, with David Greising in Chicago and Judith H. Dobrzynski in New York

A HEALTH BILL CAUGHT IN THE POLITICAL CROSSFIRE

Presidential campaigns are fought on many fronts, and sometimes innocent victims get caught in the political crossfire. In all the controversy over health care policy, there's one measure that just about everyone agrees should become law: reforms making it easier for small businesses to buy insurance coverage for their workers. But even near-unanimous support may not be enough for a modest health measure to survive the intense partisanship of the fight over an "economic recovery" tax bill.

When the Senate Finance Committee drafts its version of the bill in early March, Chairman Lloyd Bentsen (D-Tex.) wants to attach small-market insurance reforms. He would insist insurers cover—and at a reasonable rate—employers whose workers incur high-cost illnesses. He would bar insurers from

denying coverage to any group that wants it and from charging high-risk groups much more than others. The bill would assure coverage of workers with pre-existing conditions.

Small businesses, insurers, and President Bush support reform enthusiastically. "If this is enacted, it will take away a lot of the momentum for doing something more," says an insurance lobbyist.

But the Democratic-controlled Congress seems determined to produce a tax bill that Bush will veto. Most Democratic leaders would be thrilled if Bush killed legislation including both a middle-class tax cut and a popular health care reform.

A veto won't be the end of this year's debate. Bentsen is likely to try again with small-market reform, while Senate Majority Leader George J. Mitchell (D-Me.) wants a vote on a comprehensive health care bill. And that prospect makes employers, insurers, and the health care industry nervous. "It's silly season," says one business lobbyist. Indeed, many people would be happy to see 1992 pass with no action.

By Susan B. Garland



ONLY CLINTON IS HAVING A CAKEWALK RAISING MONEY

THE NEW GENERATION AT SIEMENS

Its future—and Europe's high-tech hopes—rest on the shoulders of 500 young middle managers

The bus plunged ahead aimlessly in the darkness of a forest near the German-Czech border. As an aide struggled to read a map, the dinner outing for Siemens managers and reporters was turning into a fiasco. Taking charge, energy chief Heinrich von Pierer marched to the front, fired the fumbling aide, and guided the bus to the restaurant. Onlookers were stunned: Von Pierer's swift punishment broke sharply with tradition at paternalistic Siemens. Next morning, he rehired the man. But the message was clear: Von Pierer was breaking the mold.

That's just what Siemens' supervisory board ordered when it chose von Pierer to take over as chief executive of the \$45.6 billion electronics giant this September. As head of a company with 402,000 employees, von Pierer will have a challenge every bit as great as the one that confronted John F. Welch Jr. when he took over and subjected General Electric Co. to shock therapy. Von Pierer says he admires Welch but won't resort to mass dismissals. His style will be tailored to Germany's consensus-style corporate culture. "Good management is the art of making change painless," says von Pierer.

LAST BEST HOPE. The 51-year-old lawyer and economist—and former tennis champion of Bavaria—is catapulting to the top of the German giant in the midst of a critical transition. CEO Karlheinz Kaske, 64, launched a reorganization two years ago designed to whip Siemens into shape for the 1990s and beyond. Under mandatory retirement rules, however, Kaske must step down—and the job isn't finished.

This changing of the guard represents a broader transformation under way in Germany as companies gird for more intense competition from the Japanese in

particular. Beating them will require a management revolution. "European companies take longer to react," says Hermann Franz, board member in charge of strategic planning. "So you have to do something before the catastrophe hits."

If von Pierer can complete what Kaske started, Siemens has a shot at carrying the banner for Europe in high technology. Indeed, with national champions

on the company's technical strength. And as the second nonengineer to run Siemens in its 150-year history, von Pierer will rank marketing muscle and sales as top priorities. "Technology can be a goal in itself, we have to earn money," he says.

'LETHARGY.' Top management knows change is urgent. The red ink in many Siemens divisions would sink most com-

panies. Although the manufacturer eked out a \$1.1 billion profit in 1991, that was only 2.5% of sales, and about half those earnings came from investing its \$11.3 billion cash hoard.

Even with an infusion of fresh thinking, Siemens may not be able to stem its losses in manufacturing soon. "There is still an astonishingly high degree of lethargy," says Adrian Brundrett, electronics analyst at Bank of Liechtenstein. The biggest problems are looming in the computer division where losses following the takeover of troubled German rival Nixdorf jumped last year to \$583 million.

Kaske began attacking Siemens' competitiveness problem by investing billions in acquisitions and new technologies. He also began to transform the old mar-

agement structure that required young candidates to wait years to move up the ranks. To break Siemens into smaller, nimbler units headed by entrepreneurial managers, Kaske's team began culling and recruiting the new bosses. He put 50 of them on a fast track, so they could assume senior posts by age 35 to 45, instead of 50 to 60. Although most are in their late 20s and 30s, a few in their 40s made the list, including von Pierer (page 48).

Throughout the German corporate landscape, those who built the postwar economic miracle are giving way to this younger breed. "The older generation



VON PIERER (RIGHT) MUST FINISH THE REORGANIZATION BEGUN BY KASKE

such as France's Groupe Bull and Thomson and Italy's Olivetti floundering and Britain's ICL already sold to the Japanese, even the French agree the German company is Europe's best high-tech hope. "Siemens must stay strong for the good of Europe," says Groupe Bull Chairman Francis Lorentz.

Von Pierer is well aware of that. He is at the cutting edge of a new generation of executives moving into power at Siemens. For these younger managers, rigid hierarchy is out, and entrepreneurial drive is in. No longer smitten with technology alone, they'll attempt to capitalize

feels it's their right to finally slow down," says 44-year-old Dirk Luperger, one of the fast-trackers. "They don't see the urgent need to change the way we do." Luperger helped Siemens take part with GEC in the hostile takeover of Britain's Plessey Co. in 1989 and now works in Siemens' Defense Systems Div.

But everyone knows it will take more than youthful enthusiasm to turn around Siemens. Nixdorf Information Systems Inc. (SNI). The takeover of Nixdorf Computer in 1990 brought Siemens market share. It is now the No. 1 European-owned computer maker. But that masks a critical weakness: Some 55% of SNI's sales come from Germany and 95% from Europe, leaving it dangerously weak elsewhere. Worse, traditional markets for Siemens mainframes and Nixdorf minis are rapidly eroding. That means von Pierer must conduct a radical overhaul in the midst of an industry slump battering even the best players. If he's a genius, maybe he can do it," says Compaq Computer Corp. Chief Executive Eckhard Pfeiffer.

PEOPLE SKILLS. Von Pierer does have a track record. As chief of Siemens' \$3.2 billion energy unit, Kraftwerk Union (KWU), he foresaw trouble in the nuclear-power-plant business during the late 1980s and stepped up conventional gas-and-steam turbine production just as the market shifted. As a result, he reduced the division's dependence on nuclear-power-plant con-



DIRK LUPERGER (LEFT) IS ONE OF 500 FAST-TRACK MIDDLE MANAGERS

tracts by more than half, and he helped prod sales into export markets.

Von Pierer succeeds by being at once tough and likable. He honed his people skills during 18 years on the city council in his Bavarian hometown of Erlangen, where, friends remember, he picked his fights carefully. "He hides his defense arsenal and seeks harmony," says Gerd Lohwasser, Erlangen's mayor. "When he does have to fight, he chooses only the finest of weapons." At Siemens board meetings, he was the first in top management to doff his jacket and roll up his sleeves. Behind this informality, however, is a shrewd listener and smooth-talking consensus-builder.

Von Pierer's skills served him well last fall in the battle for Czechoslovakia's giant Skoda engineering works. He was

able to snatch the deal away from archrivals Westinghouse Electric Corp. and Asea Brown Boveri. The contest became so hot that Westinghouse persuaded U.S. Ambassador to Prague Shirley Temple Black to lobby Czech officials, and ABB jetted in Swiss politicians to sweeten their deal.

But von Pierer sensed that the Czechs were put off by the pressure, and he shifted to a charm offensive. He played tennis with prospective partners and joined Skoda managers for a few beers at Pilsen's well-loved pubs. He even toured the town with his wife. After dozens of visits from von Pierer, the Czechs gave Siemens majority stakes

in Skoda's locomotive and energy operations. "He's a master tactician," says Jaroslav Taus, managing director for foreign trade at Skoda. "He won our trust."

Injecting this sort of risk-taking into Siemens' civil-service mentality will be gut-wrenching. Thousands of midlevel managers refuse to take personal initiative and undermine others who do. "They are used to tight structures," says one young Siemens manager. "They can only take orders and execute them." Von Pierer's appointment sends a clear signal: Those who are unable to change will be shunted aside and quietly told to seek employment elsewhere.

Von Pierer in fact built his career by dodging bureaucrats. As he rose through the ranks at Siemens' power-engineering division, he willingly circumvented the

SIEMENS:

A MULTITUDE OF CHALLENGES

UNIT REVENUE \$45.6 BILLION

Unit results include intradivisional sales

OTHER LINES OF BUSINESS

Auto drivetrains, transmissions, and electronics; transportation systems; defense electronics; appliances; audio and video systems

\$13.3 BILLION

COMPUTERS

\$7.6 BILLION FROM PRIOR YEAR

Troubled. Difficulties with products and with assimilating Nixdorf

INDUSTRIAL & BUILDING SYSTEMS

\$5.5 BILLION FROM PRIOR YEAR

Good. Will benefit from infrastructure building in eastern Germany and eastern Europe

INDUSTRIAL AUTOMATION

\$3.6 BILLION FROM PRIOR YEAR

Siemens is No. 1 in Europe, but U.S. operations are still in the red

POWER GENERATION

\$3.1 BILLION FROM PRIOR YEAR

Good. Siemens is No. 3 in the global market behind ABB and General Electric

PUBLIC COMMUNICATIONS

\$7.1 BILLION FROM PRIOR YEAR

Positive. Clinched No. 3 spot in hotly competitive U.S. market; sales up in eastern Germany

MEDICAL ENGINEERING

\$4.6 BILLION FROM PRIOR YEAR

Siemens is neck and neck with General Electric as No. 1 but faces Japanese price-cutting

PRIVATE COMMUNICATIONS

\$3.2 BILLION FROM PRIOR YEAR

Acquisition of Rolm made it No. 1 in world, but U.S. operations are still in the red

SEMICONDUCTORS

\$1.3 BILLION FROM PRIOR YEAR

Losses worsening. Siemens ranks only 16th in the world in sales but has caught up in technology

chain of command and called lower-level managers into his office to get the story. By refusing to adhere to the power structure, "he made a lot of people angry," recalls Corporate Communications Manager Eberhard Posner.

Similarly, Lupberger, who has an MBA from Cornell University, has started a *glasnost* project with other young managers, called "Number Cruncher." The group's goal is to break down communication barriers between upper and lower managers. Congregating in Munich's beer gardens or pubs after work, they invite board members or top managers to discuss problems in a relaxed setting.

These up-and-coming Siemens managers will have a broader geographic focus than just Europe. And under the new organization, takeovers in faraway lands are getting easier. Both will help make Siemens more global. Wolfram O. Martin, 50, once was so discouraged by being buried in the unwieldy energy-and-automation division, he was planning to quit. Now, as head of an autonomous transportation unit, he has turned Siemens into a major force in the world market for high-speed trains. He did it by snapping up eight companies in two years—including California-based Duewag Corp. Neither the acquisitions nor the quick strategic change would have been possible under the old Siemens structure. Says Martin: "I'm the entrepreneur now."

The burning question is whether this competitive zeal can take hold in time. The billions spent on acquisitions and technologies have eaten into Siemens' cash hoard. Some 50 of its 300 businesses are losing money, and 150 are near breakeven. Productivity per employee is way below that of U.S. and Japanese competitors. Siemens must narrow the productivity and profit gaps. The board's goal—and von Pierer's task—is to double margins by the year 2000.

TEAMWORK. Von Pierer's new thinking hasn't taken hold at SNI yet. It wasn't until November that Siemens moved beyond its 78% stake and bought the rest. Before that, under German law, Siemens had only arm's-length control. So the real management test is just beginning. "How they handle Nixdorf is the key to whether the new Siemens is any different than the old Siemens," says analyst Brundrett.

Some analysts argue that Siemens should get out of computers altogether and concentrate on its strengths in telecommunications, medical equipment, and factory automation. But Siemens is too proud to do that. The most likely survival tactic will be strategic alliances. Kaske already has steered Siemens into several key technology partnerships, and von Pierer will have to accelerate that trend. Last year, Siemens teamed up with IBM in a 50-50 joint venture to produce 16-megabit memory chips and to do R&D for the

64-megabit chip. The cooperation will trim heavy losses in Siemens' semiconductor division. Despite those losses, top management insists in-house chip technology is critical to remaining competitive in more complex electronic systems.

Indeed, Siemens' strategy is to dominate the global market for electronic systems. "We don't want to be the world champion in PCs or workstations," says board member Franz. "Our goal is to become a systems company." That may be where Siemens can excel. But with computers a weak link, it has a ways to go. "Siemens is trying to vault up to be the biggest electronics company in the world," says John Chessher, an analyst at Paribas Capital Markets in Paris. "But the payback period is 10 years."

Yet compared with a U.S. company, Siemens does have some time. Safeguarded by ample financial reserves and quiescent shareholders, von Pierer and his fast-trackers won't have to cut corners for short-term performance. Not surprisingly, the new boss sees Siemens' overhaul as akin to a lengthy tennis match where endurance and mental toughness are as important as skill. "The game's not over until the last ball is played," he advises. That's true. But don't rule out scorekeeping from the sidelines.

By Gail E. Schares in Munich, with Jonathan B. Levine in Paris and Peter Coy in New York

LOOKING FOR A FEW GOOD MANAGERS

Becoming one of "the chosen 500" fast-track managers at Siemens starts with wowing your immediate boss. He then recommends you for boot camp. If you pull off a brilliant performance during a one-week battery of tests and role-playing, you make the first cut.

But there's no letup after that. Senior management keeps a watchful eye from that day forth, analyzing performance and retesting skills. Keep up an extraordinary record for the next 10 years, and you're nearly sure to have a seat on Siemens' board.

GLOBE-TROTTERS. The first-cut trials take place at Siemens' management training center in the lush Bavarian forest near Starnberg Lake, south of Munich. Teams of four are handed a management crisis—often taken from Harvard case studies—and given limited time to solve it. Top managers and a psychologist assess each player's product knowledge, creativity, and leader-



KIRCHGEORG: YOUNG HOPEFULS GUNNING FOR THE 500 DON'T JUST WAIT HOPEFULLY

ship ability. One case: how to handle the press and demonstrators gathering around a factory after a mercury spill.

As part of the trial, each participant must also criticize his colleagues' performance and rate them on such attributes as risk-taking propensity and information-gathering. Those who continue to show pluck can expect a whirlwind career, moving from one plum job assignment to another, across divisions and into foreign countries. And salary raises for excellent performance can boost their pay, starting at

\$60,000, by as much as 30% a year.

Young hopefuls who are gunning for the 500 aren't waiting patiently. Many already act like the chosen and are driving hard to help change the old culture. That includes speaking their minds. "You need to find people you work well with and establish a critical mass for change," says Markus Kirchgeorg, 29, who is aiming for the 500. "And not only with people on the same level." That's just the kind of ambition Siemens wants to see.

By Gail E. Schares in Munich

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McDONNELL DOUGLAS' FAR EAST HOPES ARE DIMMING

Deals with Taiwan, China, and other nations are in trouble

It seemed like a strategic alliance made in heaven. Bulging with cash, Taiwan was eager to buy into the civilian aerospace industry. And financially strapped McDonnell Douglas Corp. was looking for partners in Asia to help build its new jetliners. So it made perfect sense last fall when McDonnell announced that it would sell up to 40% of its airliner business for \$2 billion to fledgling Taiwan Aerospace Corp.

But suddenly, McDonnell's entire Asian strategy is starting to sputter. That's particularly bad news, since the fast-growing region is key to the company's future. The main holdup is in Taiwan. Its legislators are firing a barrage of criticism over what the country is getting for its billions. This has forced the government to delay closing the deal until completion of an outside review. Those findings may not be out by the end of March, when McDonnell had hoped to receive a \$1.2 billion downpayment. Beyond that, Singapore has scrapped plans to buy McDonnell aircraft, and in China, where the company has been co-producing narrowbody jets, sales are falling short of expectations.

NEW JET. Both McDonnell and Taiwan Aerospace insist the deal will go through. As jet fighters roared overhead at the Singapore Air Show on Feb. 25, Robert H. Hood, president of McDonnell's Douglas Aircraft unit, dismissed the probe as normal "due diligence." He predicts the company will get the full \$2 billion by yearend, in time to start building production facilities for the MD-12. A long-range widebody that can carry up to 520 passengers, the plane would be McDonnell's first challenger to Boeing Co.'s lucrative 747-400.

But his assessment may be too rosy.

Taiwan is under pressure from its legislature to reduce its proposed investment. The government may have to rope in the private sector, which has been lukewarm to government schemes to develop a civilian aircraft industry. Even for Taiwan Aerospace, the terms of the deal are far from set. "Everything needs to be evaluated," says Senior Vice-President George K. C. Liu. Taiwan may invest "\$2 billion, or \$1.5 billion, or \$1 billion—nobody knows." As for buying a 40%

\$2 billion for production facilities and development costs.

McDonnell's venture in China is also in trouble. Since 1986, the company has been co-producing MD-82 jets in Shanghai. By having a Chinese plant, McDonnell hoped to get the inside track in the competition to supply 150 planes for China's domestic routes. It planned to sell the Chinese its MD-95 jetliner, with production to start in Shanghai by 1996. But the Civil Aviation Administration of China (CAAC), the country's flag carrier, wants to buy from Boeing. China now says it's committed to make only 40 planes in Shanghai. And that may be all that McDonnell gets.

In these hard times, McDonnell needs as many orders as it can land. Overall, its commercial aircraft backlog was \$17.9 billion at yearend, down 26% from the year before. It didn't help when Singapore Airlines Ltd. decided against buying 20 MD-11s last year, and switched to the Airbus 340, which can fly greater distances.

'SOMETHING FISHY.' But nothing is more critical to McDonnell's survival in commercial aircraft than the Taiwanese link. The plan is to form an Asian consortium, including Singapore and South Korea, that will buy up to 49% of McDonnell's commercial business. But first, McDonnell needs to nail down the Taiwan Aerospace deal.

Given the growing clout of Taiwan's legislature, that won't be easy. It already has shown its might: In January, it vetoed a \$2.6 billion investment in Malaysia by state-owned China Steel. Lawmakers are now outraged over the deal's secrecy. "If it's such a

good deal, why are they keeping us in the dark?" asks Tsay Fun-dow, an opposition legislator. "There must be something fishy about it." If legislators nix the McDonnell proposal, the government may still try to pressure the private sector into taking the leading role. Until Taiwan's problems are sorted out, McDonnell's survival plans will be stalled on the runway.

By Pete Engardio in Singapore, Bruce Einhorn in Taiwan, and James E. Ellis in Chicago



McDONNELL THOUGHT ITS SHANGHAI PLANT WOULD GIVE IT AN EDGE IN SELLING PLANES TO CHINA, BUT ORDERS WERE SMALLER THAN HOPED

stake, "that was just a recommendation," he says. "It could be 25%."

Taiwanese critics say the country deserves more for its money, particularly technology transfers. After all, they argue, it already assembles its own jet fighters and engines. As it stands now, Taiwan gets its 40% stake, a role in designing the MD-12, and will put together wings and fuselages. And if the government goes ahead with the deal, the \$2 billion is just for starters. Taiwan would probably have to dole out an additional

CONSUMERS START TELLING IT TO THE JUDGE

They're challenging Japan's legal shields against product-liability suits

One evening in 1990, Chisao Kaji and his wife were watching television in their two-story, wooden home in Osaka. As they remember it, their seven-year-old Sharp TV suddenly let out a hiss and went blank. Baffled, Kaji's wife unplugged the set, and the two went upstairs to bed. Minutes later, their 25-year-old daughter shouted as smoke filled the house. Kaji and his wife fled. Their daughter was found dead, overcome by fumes.

Officials concluded that the fire started where the TV stood. But they added that someone might have broken in and set the blaze. Kaji saw it differently and took a step rare in Japan: He sued Sharp Corp. for \$176,000, charging that faulty design of the TV caused the fire. Sharp declined to comment. However, it recalled 48,000 newer model TVs on Feb. 25 after 18 emitted smoke. Pioneer Electronic Corp. and Toshiba Corp. have also mounted recalls.

For years, Japanese consumers have been a docile lot. But now, consumer consciousness is rising. That's prompting government committees, including one set up by Prime Minister Kiichi Miyazawa, to take a hard look at consumer protection. The Social Democratic Party is even drafting Japan's first product-liability law.

STACKED DECK. Such efforts could change the cushy atmosphere Japanese manufacturers enjoy at home. For decades, they have been shielded against product-liability suits. Japanese legal procedures put the burden of proof on the plaintiffs, while limiting access to evidence. Not surprisingly, in nearly 50 years, consumers have won only 150 product-liability cases. In the U.S., meanwhile, American and other manufacturers have lost tens of thousands of such suits. "It's unfair," says attorney Masato Nakamura, co-head of a consumer-protection group.

Kaji's lawsuit shows just how difficult it is for a consumer to challenge a manu-

facturer in a legal system that discourages litigation and is stacked in favor of businesses. Win or lose, claimants are required to pay as court fees a percentage of any damages they seek. That keeps damage requests low. And in his case, Kaji must prove not just that an injury occurred but that the company was negligent. In the U.S., Kaji could use pretrial discovery procedures to win access to potential evidence held by the company, such as test reports. But obtaining such information in Japan is difficult, since courts don't allow discovery.

Take the case of Honda Motor Co. It's being being sued in Kyushu for \$352,000 by the family of a 23-year-old man killed last year when his Honda allegedly accelerated and flipped over a guardrail. Nothing there was a skid mark 500 yards from the accident scene, police concluded that the man had tried to stop the car. But government officials and Honda technicians maintain there is no proof that the car was out of control. In any event, the family may have a hard time proving its case if it

can't obtain access to Honda's files. "We strongly disagree" with the family's claim, says a Honda spokesman.

Japanese legal procedures benefit companies in other ways. In January, chemical maker Showa Denko settled out of court in the U.S. with Randy Simmons, a 43-year-old Wichita (Kan.) resident. He claimed the company's food supplement L-tryptophan caused him to become a quadriplegic. Japanese newspapers say Showa faces over 1,000 similar claims in America. Showa declined to comment.

In Japan, the com-



FOODS

Chemical maker Showa Denko recently settled cases in the U.S. and Japan involving a food supplement

pany has reached undisclosed settlements in two cases involving L-tryptophan diagnosed by the Health & Welfare Ministry. Japanese lawyers say dozens of other consumers claim to have been harmed by the supplement. But "we are unaware of any other victims," says an official at Showa Denko. The company currently offers only to reimburse dissatisfied Japanese customers for purchases.

FOOT DRAGGING. Japanese consumers can sometimes obtain relief from industry-financed funds in cases involving drug side effects and injuries from household products. But awards are infrequent and meager. To some analysts this near-immunity from product-liability claims has saved Japanese manufacturers a great deal of money at home and afforded them an edge in the U.S. "If we were to adopt a U.S.-style product liability law, the cost would be very high," says Hideo Takahashi, deputy director of Keidanren, Japan's big-business federation.

Still, any new consumer-protection rule is likely to hit Japanese manufacturers with somewhat higher costs. The Social Democrats' pro-consumer measure will likely go to the Diet by this spring. So far, the ruling Liberal Democratic Party, which is backed by big business, is dragging its feet. But "the LDP can hardly say it's opposed to something protecting consumers," says Waseda University law professor Michitaro Urakawa. Consumers may soon get their day in court.

By Ted Holden, with Hiromi Uchida, in Tokyo



CARS

Honda lies with suits claiming that its cars sped out of control, causing injuries or deaths. Honda denies the charges



TV SETS

Sharp, Toshiba, and Pioneer recall thousands of TVs after some emit smoke

—A.P.

N SOUTH AFRICA, A SHOWDOWN WITH HISTORY

South Africa's whites face a stark choice when they vote in a Mar. 17 referendum on whether to continue negotiations with the black majority on a hand-over of power. A strong "yes" would likely give new oomph to the talks, where much progress has been made. But a "no," in the opinion of any observers, would lead to both heightened violence and economic decline. "It's a very important watershed in South African history," says Chester A. Crocker, former Assistant Secretary of State for African Affairs. Crocker believes that if the whites opt out of the negotiations now, they risk forfeiting their power "to shape their future."

President F. W. De Klerk called the referendum after his National Party suffered a humiliating defeat in the pro-apartheid Conservative Party in a parliamentary by-election Feb. 19. De Klerk was coming under increasing fire from white rightists for negotiating a transition to black rule. So he proclaimed the by-election in the Afrikaner university town of Potchefstroom as a showdown. He was confident of winning because his party had easily carried the constituency in the September, 1989, general elections.

ROADTEST. But the Conservatives won with 56%. Now, De Klerk feels compelled to stage a broader test in March to shore up his crumbling support. "I have to settle this once and for all," he said. He argues that the Conservatives' claims to represent majority white opinion have to be squelched for talks with the African National Congress to proceed.

Political oddsmakers favor De Klerk in this high-stakes gamble, but he has lost touch with rural Afrikaners and is vulnerable to another shocker. Even with a win, De Klerk faces continued trouble from the right, which may hold out for a white homeland.

De Klerk has pledged to resign if he loses the referendum.

Such a move would lead to a general-election victory by the Conservatives, who are led by Andries Treurnicht, a former Cabinet minister who broke with the National Party 10 years ago charging it was becoming too liberal. Treurnicht wants a return to the old apartheid policies. He would likely try to ban black political organizations, including the 1.3 million-member trade unions. He might also try to resegregate public facilities and send the police to expel blacks from white residential areas. Such moves would be met by fierce resistance. "If the Conservative Party wins, South Africa will be thrown back into a different time zone, and the ANC will have to reconsider its strategic objectives," warned ANC Secretary General Cyril Ramaphosa.

ANC RESTRAINT. A "no" vote also would send the economy into a tailspin. European diplomats in Pretoria are warning whites of the dire implications for investment. The Bush Administration, which is offering Export-Import Bank credits and help with International Monetary Fund loans as carrots to spur the talks, would consider reimposing the economic sanctions lifted last year.



WHITE RIGHTISTS CELEBRATE AFTER RECENT ELECTIONS

The last thing the ANC, which sees power almost in its grasp, wants is to turn back the clock. While the ANC resents the white minority's voting on the country's future, it sees itself as having a stake in bolstering its negotiating partner, De Klerk. The ANC has recently made concessions to De Klerk on such issues as the length of an interim government, minority rights, and regional autonomy.

Such points are evidence that the whites still retain considerable bargaining power. On Mar. 17, they will have to make up their minds whether it is wiser to capitalize on that clout now or to try to fight the tide of history.

By Alan Fine in Johannesburg

GLOBAL WRAPUP

CANADA

The U.S. Customs Service is resisting heavy pressure from Canadian Prime Minister Brian Mulroney and Honda of America Manufacturing Inc. to overturn a ruling that slaps Canadian-made Honda Civics with a 2.5% duty. Customs charges that the Civics are assembled from mostly Japanese parts so they don't satisfy the 50% North American content requirements for duty-free entry. Mulroney is trying to make the dispute a showdown on the future of free trade in North America, and Honda called a press conference on Feb. 13 to denounce the ruling.

But Customs is hanging tough. In a Feb. 20 letter to Honda of America obtained by BUSINESS WEEK, U.S. Customs Commissioner Carol B. Hallett accuses the company of a "tremendously distorting public relations campaign" and blasts it for "public grandstanding." Honda insists "there should be public debate" on the issue and urges the U.S. to negotiate a resolution with the government of Canada.

ISRAEL

The dispute with the U.S. over guarantees for loans to settle Jewish immigrants from the former Soviet Union is beginning to inflict damage on Israel. In late February, the Tel Aviv

Stock Exchange index plummeted 5%. The government's float of 19% of Israel Chemicals Ltd. on Feb. 26 came in below expectations.

The uncertain atmosphere is also helping to cause Soviet Jews to delay emigration to Israel. Only 4,000 arrivals are expected in February—well below the 15,000 to 20,000 per month predicted and the lowest since this wave of mass immigration began in December, 1989. The potential immigrants are concerned about a lack of jobs and other problems in Israel. They are also waiting for changes in property laws in the former Soviet republics that will allow them to sell their apartments.

CAN EUROPE HELP CURE AMERICA'S HEALTH CARE MESS?

U.S. policy planners are looking closely at what works well there—and what doesn't

Imagine a country where everyone has health insurance. Nobody is denied coverage or charged extra because of a bad medical history. Patients can choose their own doctors. Hospitals have state-of-the-art equipment. Yet this nation's total health care costs as a percentage of national income actually declined during the 1980s.

Utopia, you say? Actually, it's Germany. But to an American, Germany's well-oiled health machine might seem like a distant fantasy. While the U.S. struggles with rampant health care inflation and 35 million uninsured citizens, Germany seems to be able to combine universal coverage with a tight rein on costs. The same is true across Europe. And even though Europeans are grappling with problems, they have managed to stabilize or slow the growth of health care spending. None of these countries devotes more than 9% of gross domestic product to health costs, while the U.S. tab is over 12%—and rising fast.

Small wonder that American politicians and health care experts have been turning to Europe (and Canada, page 54) for ways to tame the U.S. health monster and extend coverage to the uninsured. Senate Majority Leader George J. Mitchell (D-Me.) has introduced a bill that mimics features of several European systems. And the General Accounting Office recently finished a study of the French, German, and Japanese systems. These countries "are natural laboratories to look at," says David J. Gross, one of the GAO report's authors. "We can learn which things work."

And—just as important—which don't. No country has discovered the Holy Grail of health care. Europe is struggling with the same cost pressures as the U.S., brought on by expensive new treatments, aging populations, and rising patient expectations. Still, it seems to have a better track record.

While the systems vary greatly, from Britain's entirely nationalized service to Germany's decentralized network, there is one common theme: a set of health care values quite different from Ameri-

ca's. Despite federal programs such as medicare, most Americans think health care is best left to the private sector. By contrast, Europeans emphasize public health and equality of care. So they have accepted a stronger government role in health planning and control.

SIMILAR MIX. Many U.S. researchers are homing in on Germany. Unlike Britain, Sweden, and Spain, where health taxes are collected by the government and hospitals are run by the state, Germany has features similar to the U.S.: an employer-based system, numerous insurers, and a mixture of private and public care.

The Germans have solved the problem of universal coverage by simply mandating that everybody join an insurance plan. Most Germans sign up through

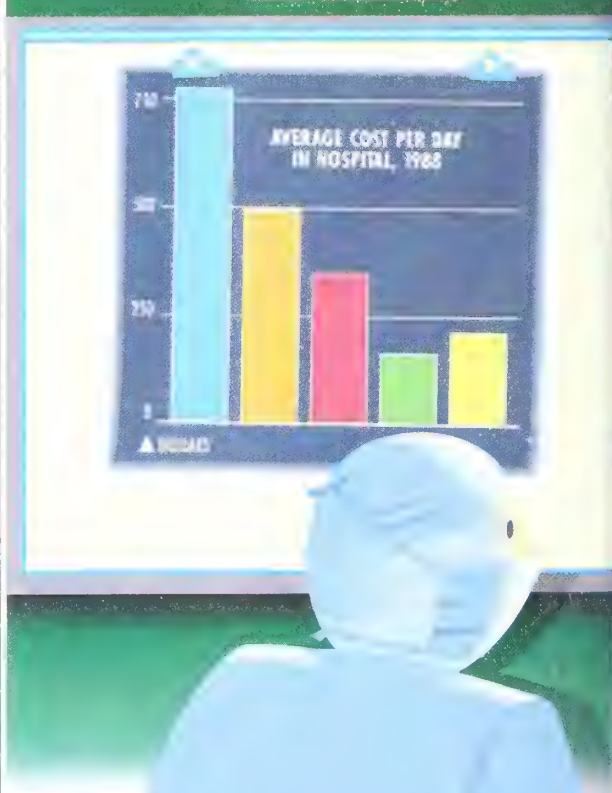
work. The fee, which averages a stiff 12.4% of annual wages, is evenly split between employee and company. Employers then arrange for insurance through one of 1,200 *Krankenkassen* ("sick people's funds"), nonprofit organizations charged with looking out for patients' interests. The government covers retirees and the unemployed.

The key is the clout that the *Krankenkassen* have with providers. By law, associations of doctors and hospitals must enter into annual negotiations with the funds, much as German unions wrangle with powerful employers' associations. The government sets an overall target, then lets the negotiators hash out how to divide it. In case of a stalemate, an arbitrator steps in. "The collective system ensures a certain framework in which prices can't spiral

out of control," says Gerhard Schulte, head of health care and insurance at the Health Ministry in Bonn. Result: Inflation-adjusted German health care spending rose 20% during the 1980s, compared with nearly 50% in the U.S.

To some U.S. planners, what's especially attractive about this model is the absence of direct government control over prices. In other countries, including Canada and France, governments get intimately involved, politicizing the process and adding bureaucracy. The Germans force doctors and other providers to shoulder responsibility for implementing cost controls. Of course, one big question is whether Germany's collective-bargaining-style system would work in individualistic America.

U.S. HOSPITAL TABS ARE HIGHER...



In a way, the U.S. private sector is emulating Germany's model via preferred-provider organizations, in which a company contracts with a set of doctors and hospitals to treat employees at negotiated rates. But PPOs are too limited to have enough effect on the U.S. system, which Jean-Pierre Poullier, director of health policy studies at Paris' Organization for Economic Cooperation & Development, likens to a cash register: The money pours in and goes out, and when the kitty is empty, they raise the premiums." In Europe, negotiated rates work because they are comprehensive, covering nearly all providers.

Europeans also give the cash register some clout through strict government supervision of capital spending. The idea is to allocate costly gear where it's needed, avoiding the U.S. phenomenon of several hospitals in a small city each buying expensive new devices—and driving up costs through superfluous treatments to pay for them. In France and the Netherlands, for example, any new construction or acquisition of expensive equipment needs approval from the government. France takes the measure one step further, requiring government approval to use equipment. Of course, a government clampdown on the purchase of machines has its drawbacks. French doctors complain that the regulations often mean long delays in getting equipment. And patients often have to travel

In Germany and France, managed care plans let patients choose any doctor

farther or wait longer for treatment.

On the other hand, says Bengt Jönsson, a health economist at the Stockholm School of Economics: "If you compare prices for similar procedures, there's a big difference between the U.S. and Europe." In 1989, Jönsson studied lithotriptors, the \$1.3 million machines that zap kidney stones with sound waves. Dissolving the same kidney stone cost \$3,900 in Sweden, vs. \$5,700 in the U.S.

Europeans seem to have found the solution to another of the U.S.'s key problems: the link between an individual's health risk and insurance payments. In America, people with "preexisting conditions" have trouble getting coverage or pay astronomical fees. And a catastrophic illness incurred by one or two employees can double or triple a small business' insurance premiums—or even get its policy canceled.

European governments spread the risks across the entire population or large chunks of it. About 80% of

France's citizens are insured through a single government fund. People contribute according to their income—not their health status—usually through a payroll deduction. To American eyes, the amounts seem high: Employers contribute 12.6% of their total payroll to health insurance, and employees a steep 6.8% of their paycheck. But there are few complaints, notes a Senate staffer who studied the French system: "They don't view it as a tax, but as a contribution."

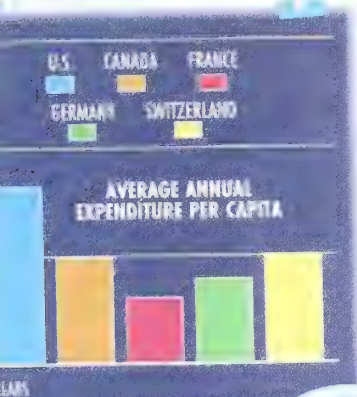
The French government establishes prices for most services, including doctors' fees, which are set at a reasonable \$16 per visit. The French government also backs up its fee structure with strict spending caps. Hospitals are simply given budgets, for example. If they go over budget, they have to economize the following year. The GAO report estimates that from 1984 to 1987, inflation-adjusted hospital spending was 9% less than it would have been *sans* budget caps. They "are the teeth" that keep costs in line, says the GAO's Gross.

HOUSE CALLS. In addition to strict budget controls, Europeans place a high priority on prevention—even the British, who spend only 40% of what Americans do on health care. Britain's much-maligned centralized National Health Service, with its long delays and constant funding crises, is hardly an ideal model. But it has at least one enviable feature: its maternity and newborn care. All pregnant women are treated free of charge, and after a new mother comes home from the hospital, an experienced midwife makes daily house calls to offer advice. In contrast, maternity care in the U.S. is an ad hoc affair—great for the rich, terrible for the poor—and a health care headache for everyone, since neglect of a teenage mother can result in premature birth, which can add up to \$70,000 in hospital costs.

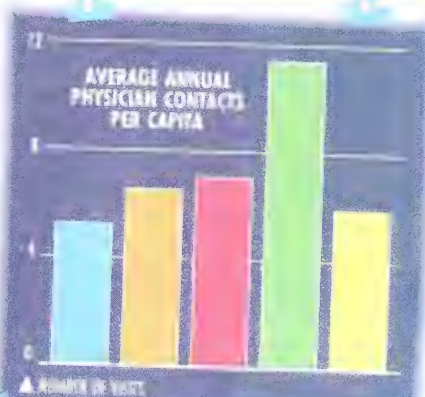
Emulating any of these systems would have its drawbacks. Even with centralized planning, Europeans still find that controlling costs is like squeezing a balloon: They just pop out somewhere else. In France, where physicians' fees are regulated, some popular doctors demand under-the-table payments from patients. In Germany, where per-day hospital rates are preset, insurers find that hospitals boost fees by keeping patients longer—an average 13 days, vs. 7 in the U.S.

The essential European formula of "spend less to cover everyone" can mean painful compromises that Americans might not like. In Britain, 1 million people are on waiting lists for "nonemergency" surgery—including cataract removal and hysterectomies. Some patients wait more than two years. And those over 60 often don't get costly kidney dialysis. "If I were rich, I'd rather

...AND SO ARE COSTS FOR DOCTORS...



...DESPITE FEWER VISITS



be in America," says Julian Le Grand, professor of public policy at the University of Bristol.

Other experts point out that more research needs to be done on overall health indicators—i.e., whether people fare better or live longer in the U.S. or European systems. For example, the U.S. spends a lot of money on geriatric care—and it shows: Americans over 80 have the world's second-longest life expectancy, just behind Iceland.

But beyond the pros and cons of different systems and the feasibility of

adapting them in the U.S. lies one overriding principle: To Europeans, health care is a fundamental right, not an employment perk. Trevor J. Andary, a 23-year-old teacher from Kentucky, has had first-hand experience with this philosophy. He broke his spine in a tumble off a Welsh mountainside last October and was paralyzed from the chest down. After emergency treatment, Andary wanted to return home. But he had no health insurance and wasn't covered by his parents'. So, instead, he has been taken care of—at no cost—through Britain's Na-

tional Health Service and is now undergoing extensive rehabilitation.

Even if he had been insured in the U.S., Andary believes cost pressures would have meant less rehab and a more difficult adjustment for him. "They're able to take more of the human side here and take as long as needed with a patient," he says. That's one lesson the U.S. would do well to learn.

By Mark Maremont in London, with Gail E. Schares in Bonn, Stewart Toy in Paris, and Susan B. Garland in Washington

Commentary/by William C. Symonds

IT'S NOT PERFECT, BUT IT SURE WORKS

On Jan. 7, Peter Paterson, a retired Canadian accountant, had his first appointment with one of Toronto's leading heart surgeons. The diagnosis: He needed surgery—fast. The next week, Paterson was admitted to a hospital, where he received a quintuple bypass. A rapidly recovering Paterson—who paid nothing for his care—was so impressed that he wrote his surgeon a letter of thanks. "The medical system we have here in Canada is wonderful," he says.

Paterson's experience may be dismissed as an anomaly by the critics, from President Bush on down, who argue that Canada's nationalized health insurance doesn't work. They say it's costly, bureaucratic, and burdened with waiting lines so long that many opt for care in the U.S. Yet Paterson's story is actually typical of the Canadian program's ability to deliver quality care in emergencies. Canada does require patients to wait for critical procedures such as hip replacements. Still, it does a far more equitable job providing reasonably priced health care to all.

LESS DREAD. The merits of the system, a kind of countrywide medicare administered by the 10 provinces, are many. Canadians don't worry about losing their health insurance because of unemployment or "preexisting medical conditions." Nor do they have to dread being financially wiped out by catastrophic illness. The system pays the entire cost of medical treatment, though dental care and prescriptions aren't included.

Canada's plan is funded mainly through personal income tax revenues—one reason why Canadians have steep income tax bills. The top combined federal and provincial marginal rate is about

CANADA'S SYSTEM

- ✓ **COVERAGE** Program covers all residents for major medical and hospital bills
- ✓ **FUNDING** Through income tax revenues (average top bracket: 48%) and employers' payroll tax. Doctors and hospitals reimbursed directly by provincial governments according to negotiated schedule of fees. Patients pay nothing
- ✓ **STRENGTHS** Canada outperforms the U.S. in basic health indexes, including infant mortality and life expectancy, but it spends 40% less per capita on health care. Patients choose any doctor they wish
- ✓ **WEAKNESSES** Patients often forced to wait for nonemergency surgery, such as hip replacements or even coronary bypasses. Shortages of equipment as government tries to contain rising costs

DATA: BW

48% on income over \$50,000. Even so, Canadian health care expenditures per capita run 40% less than in the U.S., and the burden on large employers is dramatically lower, too. In 1990, Ford Motor Co. of Canada spent \$41 million on coverage for its 22,000 workers, or about \$65 per vehicle produced. In contrast, Ford Motor Co. USA spent \$300 per vehicle.

Does the system work? Life expectancy in Canada is 77 years, vs. 75 in the U.S. And the infant-mortality rate is 7 per 1,000 live births, compared with the U.S. rate of 11 per 1,000. Yet in 1990,

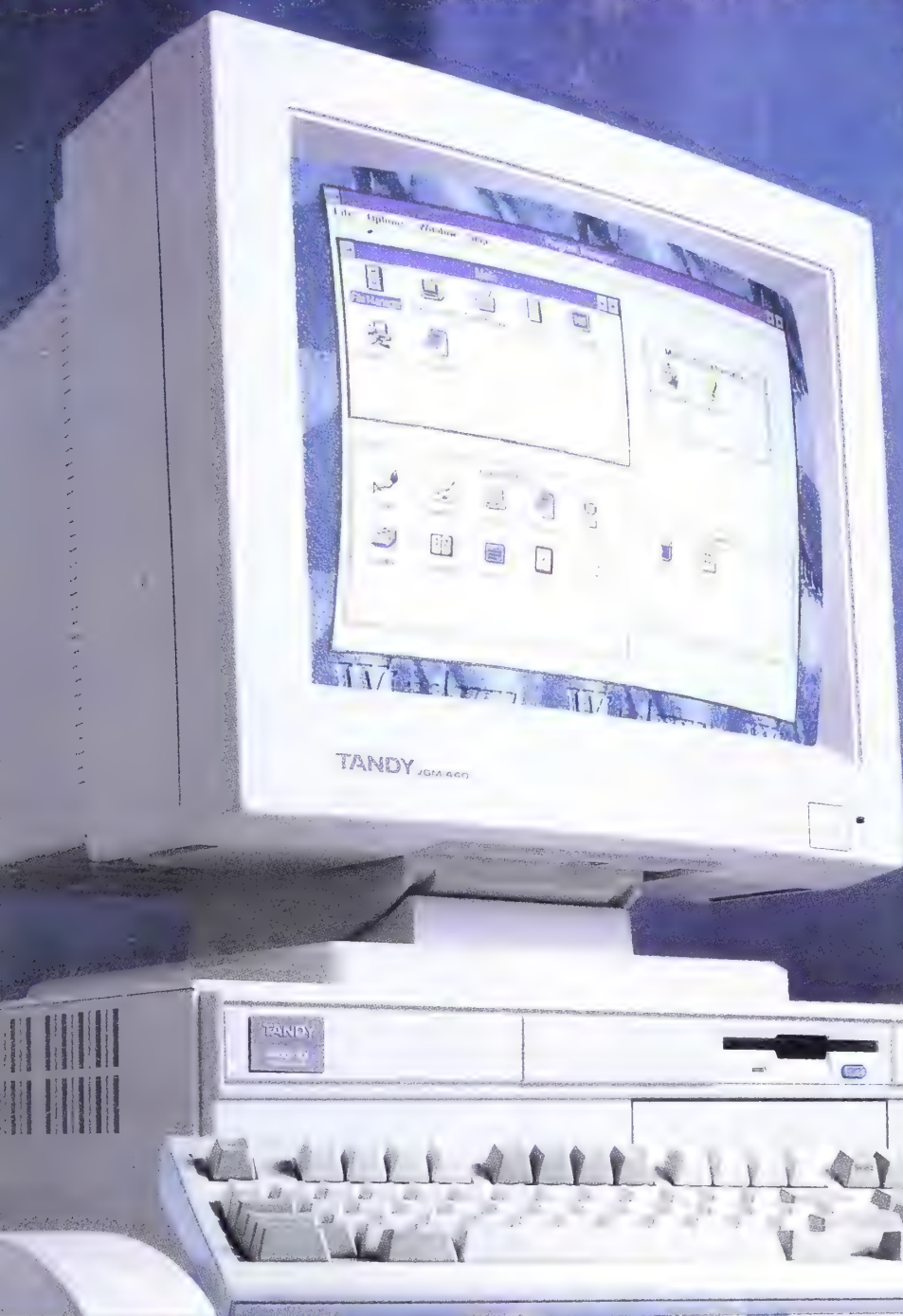
Canada devoted only 9.5% of its gross national product to health care expenses while the U.S. spent 12.2% of its GNP.

Canada has controlled costs by relying on a single insurer: the government. As a result, patients don't have to bother with endless insurance forms, and doctors and hospitals need not go to dozens of insurance companies to collect payment. The U.S. General Accounting Office reported last year that the U.S. could save \$67 billion in administrative costs by shifting to such a single-payer system—"more than enough to finance insurance coverage for the millions of Americans who are currently uninsured."

'CLEAR THREAT.' These days, though, constraints are worrying Canada. With a recession cutting deeply into tax revenues, the country's 20-year-old system is facing a growing financial crunch. Quebec is proposing a fee of \$5 (Canadian) per doctor visit. And treatment delays are mounting. In Toronto, patients must now wait an average of two to three months for a coronary bypass (though those in imminent danger get priority). The restrictions "are a very clear threat to our system," warns Dr. Alan Hudson, CEO of Toronto Hospital.

Nevertheless, Canada's approach provides another compelling advantage: the ability to choose one's own physician—an increasingly limited privilege in the U.S., as employers switch to managed care organizations with their lists of participating physicians. It's ironic that a feature so cherished by free-enterprise-oriented America should thrive in the government-funded Canadian plan.

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Comparing a used Dodge Spirit to a new Honda Accord seemed a little ridiculous. Until we saw the results.

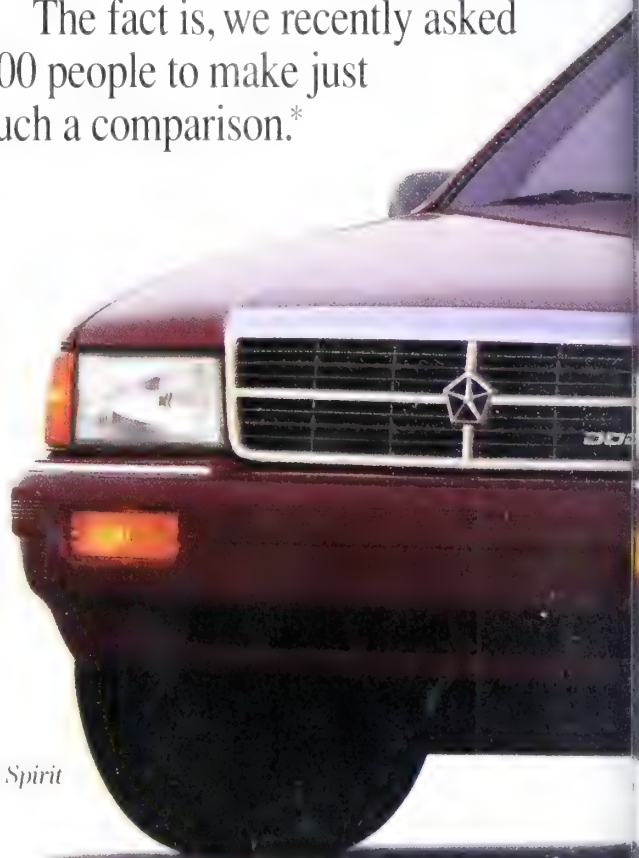
Put a brand new Spirit up against a new Accord, and you've got a pretty fair contest. After all, Spirit comes in at just \$12,682 – even when it's loaded with an automatic transmission, air conditioning, electronic speed control, a four-speaker stereo, tilt steering column, and more.[†]

Plus, Spirit gives you a standard airbag. And the Owner's Choice Protection Plan, a warranty choice you don't get from Honda or anyone else.^{††}

But put 70,000 miles on a Spirit and

then compare it to a new Accord. You wouldn't think it could possibly compete. But it not only competes...it wins.

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*100 GM & Ford owners from the Los Angeles area likely to buy an import compared '92 5-passenger models. **MSRP comparisons of 1992 Spirit with 22D Pkg. and available

They rated both cars on 33 different counts, covering driving and handling ease, smoothness on the road, comfort and convenience, roominess and appearance. Overall, 58 of those 100 drivers chose the used Spirit over the new Accord.

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In Mickey Drexler's idealized future, everybody would show up for work dressed as comfortably as he is now: soft leather shoes, rumpled khaki pants with pleats, and a wool sports coat.

It is only natural Drexler would go casual. After all, he's president of The Gap Inc., and these clothes are his business. There's nary a wing tip or high-heeled shoe in sight at The Gap's San Francisco headquarters. Employees pad

across the blond-wood floors decked out in all manner of casual attire—cotton shirts, khaki pants, wool sweaters, and denim. Lots of denim. Hey, that guy down the hall, is he from the mailroom or is he the chief financial officer? There's no way to tell from the cut of his jeans.

But just because these workers aren't trapped in panty hose or gray flannel, don't think serious business doesn't get done here. Millard S. Drexler,





PRESIDENT MICKEY DREXLER (LEFT), HAS MADE THE GAP AMERICA'S NO. 2 CLOTHING BRAND. DESIGNERS FUMIATTI AND SCHULTZ KEEP STORES STOCKED WITH GARB FROM TURTLENECKS TO BOXER SHORTS

, has turned The Gap into the most popular and profitable specialty clothing chain in American retailing today.

Recession? Retailing retrenchment? That's for the rest of the pack. Sales at The Gap and its clothing stores, GapKids and Banana Republic, blasted up 30% in the fiscal year ended Jan. 31, to \$2.5 billion. Earnings are expected to rise 20%, to \$225 million. And the glittering results are no fluke. Over the past three years, the company has posted average earnings growth of 43%. "The Gap

is a huge success, while retailers around the world are struggling like crazy," says Melvin Jacobs, chairman of the New York-based Saks Fifth Avenue department-store chain.

The formula behind The Gap's rise is invoked by Drexler almost as a mantra: "Good style, good quality, good value."

That's good enough as far as it goes, but The Gap is a lot more than nice-looking T-shirts and denim jackets. It's a network of sites shrewdly chosen by founder and Chairman Donald G. Fisher. It's a carefully tended vi-

CAN THE NATION'S HOTTEST RETAILER STAY ON TOP?

sion of a Gap store as a clean, well-lighted place where harried consumers can shop easily and quickly. It's a culture that fusses over the most mundane details, from cleaning store floors to rounding counter corners at GapKids stores for safety's sake. And it's a high-tech distribution network that keeps 1,200 Gap stores constantly stocked with fresh merchandise.

LIKED LOOK. The result is a company that connects with consumers the way only a few other giant brands, such as Coca-Cola or McDonald's, manage to do. Buttressed by its acclaimed advertising (page 64), the Gap look is accepted equally by tots, teenagers, young adults, and graying baby boomers.

Barry Sacker, a 52-year-old human resources administrator in Brooklyn, N.Y., knows all about Gap appeal. His favorite shirt is a Gap purple corduroy button-down, but his 13-year-old daughter, Diane, and his 16-year-old son, David, borrow it all the time. Other chains may mimic The Gap's clothes, Diane says, "but The Gap has the only ones that look really good and feel really comfortable."

The Gap is intent on spreading its look further. Already firmly ensclosed in 700 of the country's 1,500 biggest malls, it's taking advantage of recessionary blues by locking up sweet lease deals, moving into downtowns and urban neighborhoods, and opening on the main streets of midsize cities. This fall, The Gap will dip its toe into a new market, casual shoes, with several new Gap Shoes stores. Dean Witter Reynolds Inc. analyst Donald I. Trott figures The Gap empire could hit 2,000 stores and almost \$5 billion in sales by 1995.

You'd think Gap executives would be jumping for joy, but they remain determinedly low-key. They stayed virtually invisible throughout 1991, even as the company churned out gangbuster numbers. Drexler firmly declined an offer to appear on *Nightline* during the Christmas shopping season to discuss The Gap's roaring success during one of re-

tailoring's worst recessions. Fisher told a friend he'd prefer to stay out of the public eye. "I don't want to be a Donald Trump," he said.

So is The Gap headed for a Trumpian tumble? Is its success an aberration of the recession? After all, people may well start buying flashier clothes again when times get better. And what happens when teenagers and young adults, gaga for The Gap right now, go on to the next fad? Isn't The Gap overexpanding and saturating mar-

today, and its price-earnings ratio is heady 35. So it's easy to figure that 1992 "is going to be a roller-coaster nightmare" for Gap shares, says analyst Jean M. O'Neill of Kidder, Peabody & Co.

In interviews with *BUSINESS WEEK* The Gap's ordinarily press-shy executives say they aren't losing any sleep. "We don't worry," Fisher says. "We have a distinct advantage in our name, our merchandise, and the number and location of our stores." Drexler doesn't deny that The Gap has benefited as consumers turned their backs on ostentatious display. "It's cool to say you shop at Wal-Mart," he says. But he insists that the shift to ward value is a long-term trend, sure to continue through the 1990s. Drexler is a good example: He recently traded in an upper-crust Range Rover, which broke down a lot, for a Ford Explorer, which is holding up nicely.

And, says Drexler, don't count out The Gap's staying power. "We've been doing the same thing for seven or eight years," he says. "This company is no overnight success." For most of that time, Drexler has been honing The Gap's design skills. While he concentrates on the look of the clothes and stores, Drexler has a steady partner and boss in Fisher. Low-key and conservative, Fisher, 63, generally defers to Drexler on merchandising but still works out the gritty details of site selection, store con-

struction, and manufacturing. **HEAD-SHOP DAYS.** Fisher may be no merchandiser, but The Gap is very much his brainchild. The chain started off in the hippie-and-head-shop days of 1969, when Fisher, then a 41-year-old California real estate developer, couldn't exchange a pair of Levis that were an inch too short. Sensing a need for a place that sold jeans in a comprehensive array of sizes, he set up shop in San Francisco on Ocean Avenue. The first ads touted the store's "four tons" of Levi's. "You couldn't get into the store" because it was so crowded, Fisher says.

Before long, Gap stores



SLEEK DISTRIBUTION CENTERS ARE KEY TO THE GAP'S SUCCESS



kets? Won't rivals learn to mimic the Gap successfully?

Certainly, The Gap will be scrutinized for any hint of weakness this year. It will have to hold its own against retailers trying Gap-like concepts. And after three years of stupendous growth, The Gap's pace is bound to ease (chart). Although Wall Street forecasts 20% annual earnings growth through 1997, a healthy rate by any measure, the first unflattering comparisons with 1991 results are sure to shake individual investors and money managers who buy on earnings momentum. The Gap's stock has risen from around 4 in 1987 to 50 or so



THE GAP'S SIZZLING RECORD

The Gap's look is in with kids, teens, parents—and investors



THE RETAILER IS A STAR PERFORMER...

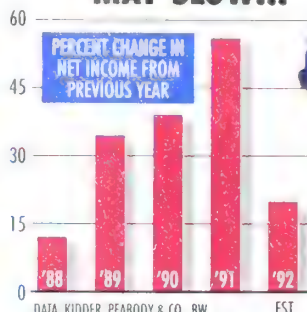
PERCENT CHANGE IN APPAREL MARKET SHARE, 1990-91



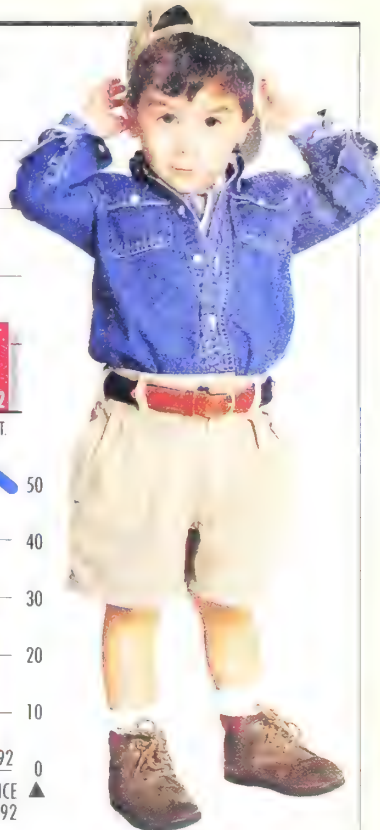
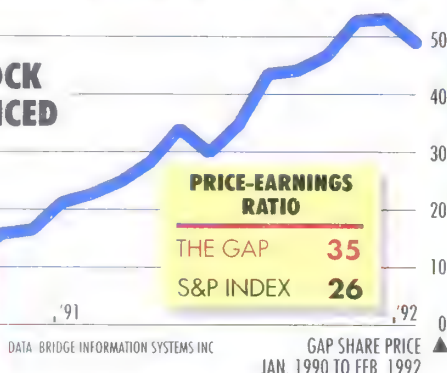
* INCLUDES THE GAP

DATA: KIDDER, PEABODY & CO.

...BUT GROWTH MAY SLOW...



...AND THE STOCK IS RICHLY PRICED



were sprouting across the country. Since Levi Strauss & Co. would not allow discounts on its jeans, Fisher got a handsome 50% markup on his mainstay product. But in 1976, the year The Gap went public, the Federal Trade Commission ruled that manufacturers couldn't impose prices on retailers. Cut-rate Levi's flooded the market, and The Gap's margins suffered.

Fisher tried to sell higher-margin core-brand apparel under such labels as Foxtails and Chocolate Fatigues. TV and radio ads exhorted shoppers to "Fall into the Gap," but once they fell in, they found themselves in schlockville. Jammed onto pipe racks were such items as terry cloth polo shirts and two-in-one shirts with zip-off layers that revealed different-colored sleeves. The stuff would move only when sold at discounted prices. The Gap became a me-too bargain basement.

In 1983, Fisher approached Drexler, who had just engineered a turnaround as president of Ann Taylor Stores Corp. (page 63). "The stores were in good taste, the merchandise was in good taste, it felt good to me," says Fisher. He asked Drexler to head a new retail chain he was considering as a way to diversify. Instead, Drexler offered to try to revamp The Gap. First step: liquidate existing merchandise through big promotions. That sent profits plummeting from \$22 million in 1983 to \$12 million in 1984. The stock went from almost 3 to a

little more than 1 in the same period. "We were all scared, and I was more scared than anyone the first year and a half," says Drexler.

SIMPLE PALETTE. Swallowing his fear, Drexler started a one-man program to communicate his idea of what The Gap could be. In front of skeptical employees he waved pictures of Ralph Lauren in a jean jacket to prove that denim could look hip and elegant. He asked his designers why they didn't wear Gap clothes. "We said we don't like them, they're junk," remembers Patricia De-Rosa, The Gap stores' executive vice-president for merchandising. But his message sank in: Design clothes you would wear, and the customer will follow.

Some employees were still confused, so Drexler handed out signs with a single word in white letters on gray background: Simplify. He meant not just the clothes, but the whole way The Gap does business. He got rid of executives who relied on complicated quantitative research. Instead, he hired people who understood his approach of quickly testing his fashion intuition in new products and pulling the nonstarters fast.

Drexler dumped the pipe

racks and the junky shirts and played up The Gap's basic jeans and sweats. He brought in all-cotton merchandise in a deep assortment of colors, made space in the aisles, and laid out the goods folded on tables and shelves where they could be easily touched. "When someone walks in the store, I want them to feel as if it were all designed from one mind," Drexler says.



Drexler and Fisher also boosted quality. Thanks to its early foray into private-label apparel, The Gap had already established ties to manufacturers. Today, the company has 200 quality-control inspectors working inside factories in 40 countries to make sure specifications are met right from the start. Because The Gap designs its

own clothes, chooses its own materials, and monitors manufacturing so closely, it can keep quality high and costs low. And a \$75 million automated distribution center opened this winter outside Baltimore will enable The Gap to supply New York City stores daily instead of the current three times a week.

The tight control extends to the stores themselves. There's no more room for creative expression at a Gap store than there is at a McDonald's—maybe less. Gap merchandise goes through a major



shift about every two months, and store managers receive a book of detailed instructions that tell them exactly what clothes go where. White walls are touched up once a week, wood floors polished every three or four days.

Sales staff receive no commissions, but James V. O'Donnell, The Gap's chief operating officer, pumps up workers with constant contests. Bring the most multiple purchases to the register, for instance, and win a Gap-logo watch. During the shopping rush over Thanksgiving weekend last year, O'Donnell had Pizza Hut and Domino's deliver 15,000 pizzas and 12,000 six-packs of Pepsi to store staffers. They had to chow down out of sight, though. Eating or drinking in front of customers will get you fired.

MILANESE ME-TOO. Drexler once oversaw every major design decision, and he still keeps a close watch. He visits stores constantly and rarely comes to rest at headquarters. A typical day at The Gap's San Francisco office finds Drexler roaming the halls, popping in unexpectedly on staffers to praise or criticize dozens of projects in design, advertising, and merchandising. His self-appointed role is to keep "rock star" designers in harmony with the company's more down-to-earth managers. "You need both to make beautiful music," he says. Being a member of this band isn't for everyone. Insiders say newcomers either adapt easily to Drexler's vision—or they quickly walk.

Drexler's opinionated style comes through at a meeting in San Francisco. About 30 merchandisers are showing the proposed fall collection for Gap-Kids to Drexler. The woman in charge of jackets holds up a hooded design cut to look very puffy. Everyone holds a collective breath while Drexler eyes the jacket: "I hate it," he says. A big cheer goes up: The New York designers were pushing the item, but the folks in headquarters found it ugly. The jacket is out.

More often these days, Drexler finds his staff's design sense meshes with his own. The Gap's New York designers, led by Lisa Schultz and John Fu-

miatti, create their new collections 6 to 12 months in advance, deciding first on a "concept" and a palette of colors, then designing individual items to fit the scheme. This spring, it's deep shades of mustard, burgundy, and blue

that blend with khaki and linen. A brand-new collection hits the stores about every eight weeks, relegating last month's idea to the markdown section. The rapid turnover keeps design mistakes—such as an unpopular line of pastels in 1989—from languishing on shelves.

Many ideas are original, but others are unabashed knock-offs: Last winter's pullovers and jackets, for example, were based on designs introduced several years ago by Patagonia Inc., the pricey outdoor-clothing company. But The Gap's designers correctly figured the style was about to become widely popular. Another designer found a flowered pattern she liked on a purse in Milan and copied it for a shirt.

One design idea no one at The Gap would ever consider is plastering The Gap name on their wares. "It's not us," says designer Schultz. Drexler recently previewed a selection of footwear for the new Gap Shoes stores and spied a pair of boots with a Gap label sewn on the outside of the tongues. He insisted that those labels be placed inside.

For Fisher and Drexler, the current challenge is to keep The Gap growing. A plan now under way to expand stores to 8,000 square feet from an average of 4,000 is allowing for experiments in new adult lines, such as neckties and sport coats. Another effort to make more room for Gap goods is complete: Last December, Levi's jeans were phased out altogether. The Gap now sells only clothes under its own label. It surpassed the flagship label of Liz Claiborne Inc. in 1991 to become the No. 2 clothes brand in the U.S. after Levi Strauss.

Then there are whole new categories such as kids' clothes. Annoyed by the poor selection of children's wear he found while shopping for his 6-year-old son in 1985, Drexler convened a meeting of employees with kids at Gap headquarters. There was a lot of bellyaching about the poor quality and ugly styling prevalent in children's clothes. The result was Gap-Kids, successful from Day One and now boasting 215 stores. From \$2 million in sales in 1986, GapKids has gone to an esti-

HOW THE GAP GREW

1969

Donald Fisher, a real-estate developer, opens first Gap store in San Francisco to sell jeans and records



1970-76

The Gap, helped by heavy advertising, spreads through the U.S., opening 200 stores



1983

Chairman Fisher buys veteran happy retailer Banana Republic

After a big spurt of growth, the tail fades in 1988

1983

Fisher hires Mickey Drexler from Ann Taylor to revamp The Gap. His restructuring forces 1984 earnings down 45%

1986

GapKids launched. A hit from Day One, it began baby-Gap and now includes 215 stores



1991

As earnings rise more than 30%, The Gap is the most successful apparel retailer and the second-largest clothes brand in the U.S.



1988

Individuals of Style ads, featuring hip celebrities and produced in-house, help establish a new Gap image

(ASA COMPANY REPORT)

ated \$260 million last year.

In 1990, Drexler added babyGap departments selling simple, unilly dresses, overalls, and her basics in the Gap's palette of colors but aimed at newborns to two-year-olds: It's even another hit. "It's very difficult to find good-looking, durable baby clothes that aren't baby blue or have those little doggies all over them," says babyGap convert Carolyn Gilbert, a 29-year-old executive at an architectural firm in Southfield, Mich.

HIPPY APPEAL. Not all of The Gap's growth moves have been unqualified successes, though. In 1983, Fisher bought Banana Republic, then two Bay Area stores and a highly popular catalog



of safari-style clothes run by Melvyn and Patricia Ziegler. Banana Republic Stores performed wonderfully, going from an estimated \$44 million in sales in 1985 to \$191 million in 1987, thanks to the khaki craze spawned by movies such as the "Indiana Jones" series, *Romancing the Stone*, and *Out of Africa*. But by 1988, the safari madness ended, and Banana Republic's stores wound up losing an estimated \$10 million over two years. Fisher finally forced out the Zieglers and put Drexler in charge.

Banana Republic has been slow in recovering from its slip. The division has gone through three top product designers in four years. But the company now

says the 150-store chain is profitable at around \$300 million in sales, and management is satisfied with its reincarnation as a sort of upscale Gap with more adventurous fashions. The safari theme has so far been excised from about 70% of the unit's stores.

Despite such missteps, Fisher's little blue jeans business has made him fabulously wealthy: His family's 38% stake currently is worth some \$2.7 billion. His fortune has helped him indulge a passion for modern art: Gap headquarters houses a corporate art collection as well as a number of Fisher's Stellas, Calder's, and Lichtensteins.

To keep The Gap from making Fisher even richer, plenty of rivals are regrouping to compete. Department-store executives preach to employees about the need to "Gap-ize" the colors, fibers, and

FROM DIRTY TOWELS TO THE TOP OF THE HEAP

Mickey Drexler surrounds himself with handsome things. Museum-quality wooden model airplanes hang from the ceiling of his San Francisco waterfront office. Art books on the prairie architecture of Frank Lloyd Wright, the street-life photography of Henri Cartier-Bresson, the desert paintings of Georgia O'Keeffe are stacked on tables and scattered around his cherry wood desk. Out the window, the silver towers of the Bay Bridge dominate the view.

Of course, his fans would say that Millard S. Drexler himself is responsible for some handsome items—the clothes lineup at The Gap. But it took a while for this kid from the East Bronx to realize he had the merchant's knack for spotting trends and creating styles. An only child, Drexler grew up wanting to be a businessman—but he had no idea what business. His father bought buttons and leather for a coat manufacturer, but that didn't spark any immediate interest in the rag trade. As a boy, Mickey worked for his uncle's laundry business, folding and separating towels: The spotless ones went to restaurants, the stained ones to gas stations.

A SPARK. After graduating from Bronx High School of Science, Drexler got a business degree from what is now the State University of New York at Buffalo and an MBA from Boston University. He kept a low profile. His Boston University classmate Edward D. Winkler, president of Vermont Research Corp., remembers Drexler this way: "Never heard of him."

Drexler finally blossomed as a summer intern at Abraham & Straus, the

department-store chain based in Brooklyn, where he worked in the jeans department. Says Drexler: "It was the first time I had a clue as to what I really liked to do." He was good at it, too. After getting his MBA, he took a job in junior sportswear at Bloomingdale's Inc., where he caught the eye of merchandising manager Melvin Jacobs, who now runs Saks Fifth Avenue. "He had a sense of style. You could see there was a spark there," Jacobs says. Within six months, Drexler became buyer for women's swimsuits and sweaters. "It might take someone else two to three years for that kind of promotion," says Jacobs.

Drexler moved on to R. H. Macy & Co. and back to A&S again. All along, though, he chafed at department-store bureaucracies. At Bloomingdale's, for example, he came across a collection of basic but colorful crewneck T-shirts he thought would fly out the door. Eventually, they did. But first, Drexler had to go through layer after bureaucratic layer to get his order approved. "You were always being second-guessed, always having to negotiate," he says.

In 1980, he broke free as president of Ann Taylor Stores Corp., where he got credit for a major turnaround at the chain by updating the look and low-

ering prices. "He's contentious, he's contrarian, I could see how he could be a real pain in the butt at a department store," but he was just what Ann Taylor needed, says Sally Frame Kasaks, who worked with Drexler at Ann Taylor and was recently named the chain's new president.

Like Ann Taylor, The Gap in 1983 needed an overhaul when founder Donald G. Fisher flew to Manhattan and coaxed Drexler to sign on. Fisher had been trying for years to shake The Gap's ho-hum, bargain-basement image, but none of the merchandise managers he had hired seemed to grasp what he was looking for. "Mickey was the first person to understand what I wanted to do." Drexler left his beloved New York City and moved to California with his wife and baby boy.

In New York and San Francisco, Drexler remains tightlipped about his life outside the office. He refuses to discuss his wife, for example, in deference to her privacy. But it's no secret that a handsome office hasn't been Drexler's only reward: His 2.5% holding of Gap stock is worth some \$175 million. Not bad for a Bronx kid who once folded towels for grease monkeys.

By Russell Mitchell in San Francisco



GAP PRESIDENT DREXLER

display of their wares. Says Michael A. Gould, chairman and chief executive at Bloomingdale's department stores: "If The Gap can do what it does in 3,000-square-foot stores, why can't I do it with a lot more space?"

That may be what Gould has in mind. Bloomingdale's, as well as Neiman-Marcus and Saks, are opening boutiques to sell designer Giorgio Armani's line of A/X apparel. Armani is looking to skim The Gap's biggest-spending customers with its new A/X Armani Exchanges, which offer stripped-down fashions with a European look at prices much lower than those at the top of Armani's line.

Other retailers are also trying to outwit The Gap. The Limited Inc. has Gap-like "relaxed fit" jeans, sold in some stores with a sales tag whose design is strikingly like The Gap's. The Limited also has a new line of children's wear. Dayton Hudson Corp.'s Target division of discount stores is experimenting with a chain called Everyday Hero that

will have a distinctly Gap-like approach.

The Gap's success has inspired outright hostility among some rivals. Tommy Z. Hoffman, president of Keds Apparel, a startup licensee of sneaker maker Stride Rite Corp., recently took out a four-page ad in *Women's Wear Daily* exclaiming that "the Gap is just not feminine enough" and exhorting retailers to buy Keds sportswear so they could "take on The Gap together."

Sniping from rivals isn't likely to wound The Gap—but cooling ardor for the Gap look might. And a few murmurs of ennui can sometimes be heard in this land of Gap-lovers. Julie Grossberg, 26, a film production worker in New York and Los Angeles, likes The Gap—but only up to a point. "Sometimes I find their clothes kind of generic and not so special," she says. "I like their basic staples, but I don't walk in there expecting to fall in love with something." Such talk doesn't faze Drexler, who figures he doesn't have to have all of a shop-

per's money. As he sees it, demand can only rise for the sort of basic, casual clothing that is The Gap's forte. If the material of choice is not denim or khaki, it will be something else that The Gap will master.

Still, plenty of retailers who once thought they had a permanent place in the nation's closet have instead been battered by the changing winds of fashion. At The Limited, for example, the flagship chain of Limited Stores once held the imagination and shopping dollars of millions of young women. But now they want something else, and Limited Stores has been struggling to find a new mix. "If there's one thing that's virtually law in retailing, it's that you don't maintain a competitive advantage forever," says William Flatley, director of retail strategies at New York apparel-industry consultants Kurt Salmon Associates.

BIG GAPPLE. For his part, Drexler figures he still has new markets to conquer. There's the prospect of overseas expansion, although so far the Gap has cautiously moved only into Britain and Canada, with 35 stores in each country. But he also believes that The Gap hasn't saturated the domestic market.

Most analysts agree, although some suspect that The Gap might be getting too aggressive in New York City, where a Gap outlet seems to be popping up on every other block. That has prompted some to wonder whether The Gap will share the fate of Benetton, the once-hot sweater-and-sportswear maker that overexpanded. Not to worry, says Dear Witter's Trott. "Benetton was a loosely controlled, crappy franchise operation," he says. The Gap, in contrast, has always exercised tight financial discipline.

It may turn out that the stiffest challenge will come from within, where the hip, fast-moving culture Drexler inspires must survive in an ever-larger organization. Merchandiser Kay Vermeulen recently left the company after four years to work at Gymboree Corp., a children's clothes retailer. The Gap, she says, "has gotten so big you have to go through several people to get anything done. You have to sign off with this department and that department."

That's a criticism Drexler doesn't dismiss lightly. "I have the same worries," he says. But with this nimble, hands-on president at the helm, Gappers probably have little to fear from creeping bureaucracy—until the unlikely day that Mickey Drexler shows up for work in wing tips and pinstripes.

By Russell Mitchell in San Francisco

HOW THE GAP'S ADS GOT SO-O-O COOL

Blonde. Beautiful. Boring. That's how Maggie Gross, The Gap Inc.'s senior vice-president for advertising and marketing, reacted to the woman modeling a white Gap turtle-neck. The idea for this 1988 Los Angeles-area campaign was to show some L.A. trendies in Gap garb. But this Angelena, album designer Lynn Robb, looked like any other model.

Gross changed that. "Give me a shot of her with her own jacket on," she told photographer Matthew Rolston. Robb donned her well-worn motorcycle jacket, leaving it open to show the shirt. A fashion cliché was transformed into something that communicated, well, an individual sense of style.

That photo launched the Individuals of Style campaign—a series of black-and-white photos of personalities from jazz great Miles Davis to neo-country singer k. d. lang, all mixing Gap threads with other clothes. The message was that Gap's fashions blended with everything from Armani sport coats to Grateful Dead headbands.

A Gap credo is not to overdo anything. So the Individuals of Style campaign went on hiatus last spring, replaced by simple ads of Gap items in striking colors. A new campaign aimed at both big Gap and babyGap customers shows an infant in blue-jean-jacket swaddling. Gross says Individuals of

Style will be back "when the time is right"—but with a difference. In the 1990s, she figures, celebrities are out, and social activists could be in. The Dalai Lama in denim, perhaps?

By Russell Mitchell in San Francisco

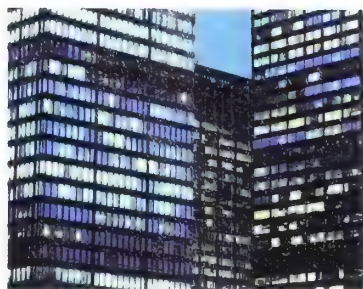
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NICK LYONS: BOOKS FOR THE COMPLEAT ANGLER



Nick Lyons has been hooked for years. "I'm a lunatic about fishing," he confesses. At 59, this New York publisher and former English professor is a careful thinker about most things. But his passion, the stuff of his daydreams, is hooks adorned with feathers floating down clear Montana trout streams.

It's no surprise, then, that Lyons' tiny shop, Lyons & Burford Publishers Inc., is devoted to fishing books. Its nearly 100 titles on the subject include many of the best books available on fly fishing. But that isn't all L&B publishes. Recognizing that people of all stripes will pay dearly to indulge their avocations, Lyons and partner Peter Burford, a 36-year-old golf nut, have built a thriving business putting out an array of books that other publishers would tend to pass by.

Lyons, a former executive editor at Crown Books, and Burford, a Princeton English major, have been snagging anglers since 1984 with such esoterica as *Power Surfcasting* and *Caddisflies*. Now, they're after other fanatics with titles such as *Making Paper* and *The Anatomy of a Golf Course*. "A lot of specialized books are being ignored by big houses," says Lyons. "They need a printing of 15,000 copies. We start making money at 2,000." Revenues last year hit only \$2 million, but L&B netted 10% of that after taxes. Is there anything they won't publish? "We were offered a book on eel fishing," says Burford. "But even we can't do an eel-fishing book."

JULIE NGUYEN BROWN: MOTOWN TYCOON WITH A DIFFERENCE

She's not your typical auto-parts supplier. First, she's a woman. Second, she's a Vietnamese refugee. But over the past four years, Julie Nguyen Brown has built a \$25 million company called Plastech Engineered Products Inc. out of two parts-makers she pulled from the scrap heap. Even though she has earned Detroit's respect, the old-boy insensitivities die hard. "She's an aggressive, shrewd businessman," says Chrysler Purchasing Executive Joe E. Harris, without a hint of irony. "A lot of times, you don't find that in these guys."

Brown, 42, is used to breaking through barriers. Born in French-occupied Vietnam, the daughter of a petroleum engineer, she left the war-ravaged land at 16 and came to Ypsilan-



ti, Mich., as a high school exchange student. Although her English was spotty, Brown eventually earned a computer-science degree from Tulane University. She lost her visa in 1972 and had to return to Vietnam. But when Saigon collapsed three years later, she returned to the U.S.—this time as a refugee in the belly of a U.S. military transport plane. She landed a job at Ford Motor Co. as a product-design engineer and soon noticed that the company's suppliers were producing shoddy parts. Brown figured she could do better.

In 1988, she got her chance. Brown bought Caro Plastic Corp. and Dynaplast Corp. for a total of \$8 million, with help from a Michigan minority development loan. The companies, which made plastic parts such as door handles and wheel covers, were both in financial trouble. But by cutting employees, buying new machinery, and improving service, Brown turned them around. Her advice for her industry: "We have to be serious about cutting costs and not just give it lip-service." A survivor like Brown can differentiate between tough talk and action.

By Greg Bowens in St. Clair Shores, Mich.

CLAUDIA KING: GOING FOR BROKE IN BANKRUPTCY

One person's loss is often another's gain. Consider Claudia King, of bankruptcy-administration firm Claudia King & Associates Inc. King uses computers to help companies manage the endless paperwork of filing for bankruptcy—a growth market these days. Her client roster reads like a *Who's Who* of bankrupt companies, from the Trump Taj Mahal to Continental Airlines to Circle K Corp.

King's firm specializes in smoothing out the nitty-gritty of bankruptcy filings by automating all the administrative requirements. A customized software package provides back-office data processing while keeping track of such mundane details as filed claims and court-required mailings. Says Circle K Controller Diane Klein: "Claudia helped us navigate through a very convoluted process."

King's path into bankruptcy court, however, was hardly smooth. Married at 19 and a mother a year later, she had to drop out of college after only two years to work. "All my education has come from the school of hard knocks," she says. Her breakthrough came in 1980, when she moved to San Francisco and started as a temporary secretary at Intel Corp. When the equipment lessor filed for bankruptcy a year later, King landed the job of administering the proceedings. With Intel's programmers, she created software to help deal with the blizzard of paperwork. By 1984, she was marketing customized versions of the package to other bankrupt companies. She moved to Jersey City, N.J. in 1985, and started her own firm—and by last year she was pulling in revenues of \$7 million.

King expects the spate of bankruptcies to continue well into the 1990s. Not that she's shedding any tears. Bankruptcy administration is a messy job. But somebody has to do it.

By Sunita Wadekar Bhargava in New York



MIKE ARMSTRONG'S LEAP OF FAITH

What made him trade a shot at leading IBM for the top slot at Hughes

The timing couldn't have been much worse. A day earlier, Robert C. Stempel had returned from his bruising January trip to Japan with President Bush. But C. Michael Armstrong was determined to meet with the General Motors Corp. chairman anyway. Armstrong, a lifelong IBM employee and possible heir to Chairman John F. Akers, was considering leaving Big Blue to run GM's Hughes Aircraft unit. But first, Armstrong needed assurance that he could run the business without too much interference from GM. "What's essential for the success of Hughes is for you to decide," Stempel promised. "You have that freedom."

That was all Armstrong had to hear. After a brilliant rise at IBM, including building its European operations into a \$26 billion powerhouse, Armstrong stunned IBM on Feb. 19 by announcing his departure. He'll report to Hughes's Los Angeles headquarters in April. His mandate: weaning the company from its dependence on Pentagon contracts.

PROBLEM CHILD. Armstrong's decision to leave IBM was largely driven by his prospects there. Both IBM CEO Akers and Armstrong say Akers made it clear that Armstrong was not going to get IBM's top spot eventually. Armstrong, 53, says there was no acrimony over the issue, adding: "I happen to know IBM has not made a decision on succession." But apparently he was restive enough to pursue the top slot at Allied-Signal Inc., a post he lost to Lawrence A. Bossidy, according to a friend of Armstrong's.

Hughes seems an odd place for an IBM lifer to make his stand. Known mostly for its high-tech military hardware, Hughes has been closely watched by GM since its acquisition in 1985 for \$5.2 billion. And GM hasn't always been happy with what it has seen. Although Hughes lived high off superpower tensions, helping to pioneer everything from satellites to guided missiles to sophisticated fighter-jet radars,

keeping costs down and production lines on schedule has been another matter. When Pentagon budgets tightened in the late 1980s, GM executives winced as Hughes stumbled.

Now, with far deeper cuts on the way, and Hughes's parent in hot financial water, the pressure will only grow more intense. Hughes's advanced medium-range missile orders, which account for 5% of total sales, are secure for now. But it has been losing scarce contracts for other missiles, including a \$270 million order of Mavericks recently snared by Raytheon Co.

The same is true in radar equipment as production winds down on two of the three fighter jets that Hughes supplies. Plans to scale back the B-2 program will also hurt: Hughes produces radar gear for the bombers. And prospects for new work dimmed when Hughes lost to Westinghouse Electric Corp. in a bid to build the radar system for the F-22 advanced tactical fighter.

Armstrong's predecessors began laying the groundwork for a move away

from defense in the late 1980s. Hughes moved earlier than most in slashing employment levels. It prodded engineers to use their expertise on flashy applications such as a solar-powered car for GM called the Sunraycer. And thanks to a string of acquisitions in satellites, in-flight videos, and even high-tech amusement park rides (table), 30% of Hughes's revenues come from commercial work, compared with next to none in 1988.

But earnings growth may be harder to come by. After buying its way into commercial flight simulators in 1988, for instance, Hughes found itself rocked by the recession, as airlines stopped buying the units. That led to a \$40 million charge in the third quarter of 1991. For the year, estimated operating earnings slid almost 19%, to \$539 million, on flat revenues of \$7.7 billion. Then there's the matter of its parent. To continue diversifying, Armstrong will have to rely on cash-strapped GM to keep the money flowing. "The key question is: Will GM's financial situation affect Hughes's ability to continue making acquisitions?" says Lawrence Harris,



ARMSTRONG WITH GM'S SOLAR-POWERED CAR

a analyst with Kemper Securities Group.

Remaking a defense contractor isn't something Armstrong had ever contemplated. But in early December, he received a call from headhunter Pendleton James, a former Reagan White House staffer. At the time, Armstrong, chairman of IBM's overseas business, was busy commuting between IBM headquarters in Armonk, N.Y., and Paris to pin down an alliance between IBM and France's Groupe Bull. Meeting with James for less than 10 minutes in Armstrong's sparsely furnished office, the IBM executive listened politely. James hinted that Armstrong wouldn't have much of a run heading IBM—where

his retirement age is 60—by the time Akers steps down in 1995. How about Hughes, where he could retire at 65? Armstrong says he was "intrigued."

GOOD VIBRATIONS. What Armstrong didn't know was that Malcolm R. Currie, the retiring Hughes chairman, felt uneasy about going outside Hughes for a successor. After a painful five-year restructuring that cut 20% of Hughes's 2,000 jobs, Currie planned to pick one of his own people to carry on. In fact, he had been grooming five possible candidates—three of them scientists or engineers with long track records at Hughes. But he had hired James to scout outside prospects, too.

The headhunter set up a meeting with Armstrong and Robert J. Schultz, the GM vice-chairman who oversees Hughes. On Jan. 19, the three sat down to breakfast at the Sky Club in New York's Pan Am Building. "The vibes were good right from the start," recalls James. Both Schultz and Armstrong grew up in Detroit, and they had known each other since Armstrong was head of IBM's marketing services and GM was one of his biggest customers. But before learning the details of the job, Armstrong had to know if he would truly be the boss at Hughes. Says Armstrong: "I was absolutely not interested in becoming a division or group president, and Bob needed to know that." Schultz and James left the meeting feeling anxious. "We both sat there convinced he was the right guy," recalls the headhunter. But they weren't sure he wanted the job. The next step for James was getting Armstrong together with Currie. By this time, with Pentagon budget cuts heightening the need to diversify, Currie had softened on the idea of bringing in an outsider. But he wondered why the IBM heir apparent would come to Hughes. "Is he really interested in us?"

HUGHES BRANCHES OUT

Like most Pentagon contractors, Hughes Aircraft is trying to find non-defense markets for its technology. Among the latest projects:

CAR PHONES Scheduled for introduction in the third quarter, the phones will employ digital technology, which should let the system carry three times more calls than current networks

DIRECT-BROADCAST TV Plan is to beam satellite signals directly to households equipped with miniature satellite dishes, starting in 1994. The service is intended to compete against cable and will be capable of handling high-definition TV signals

ELECTRIC-CAR POWER SUPPLY A radar parts plant is being converted to make a key power supply component for GM's Impact electric car, which is to be introduced in California by the mid-1990s

HIGH-TECH ENTERTAINMENT Employing technology developed for its flight simulators, the company recently introduced the Commander ride for arcades and airports

IN-FLIGHT VIDEO Hughes just signed a \$70 million deal to provide personal video screens and programming for Northwest Airlines

DATA BW

what he wanted to hear, Armstrong flew back to Armonk to inform Akers. For more than 30 years, since meeting at IBM's sales school, the two had worked their way up the IBM chain of command. At times, they even vacationed together. But Akers says he told Armstrong in the fall that he wasn't going to run IBM, and Akers knew Armstrong was considering other jobs. Their final meeting, as Armstrong recalls it, was tellingly brief. "I think, John, come the end of February, I'll be retiring from IBM," Armstrong said. "I'm considering taking this CEO job at Hughes." After a moment's silence, Akers responded with an outstretched hand, saying only: "That's

Currie asked James. "Can we really get him?"

Eleven days later, the two met at the Sky Club. Currie brought a briefcase bulging with charts and graphs to map out his plans for Hughes. The meeting started after lunch and lasted nearly five hours. Armstrong grilled Currie, pressing hard on the problem of declining defense budgets and General Motors' expectations for the subsidiary. Armstrong came away convinced he could take over quickly and "without making a lot of changes." But, he adds, "there was still one more call I had to make." He needed to talk to Stempel.

Once the GM chairman told Armstrong

one hell of an opportunity, Mike. I'm going to miss you, but good luck."

While Armstrong has never worked outside the computer industry, Schultz and Stempel obviously think he is up to the task. They're counting on his marketing experience, operational skills, and international contacts. "When we decided to go outside, we wanted someone who could come in with immediate credibility," says Schultz. Armstrong also sees himself as a sort of diplomat. "I have a lot of good friends around the world," he says. Leading a defense contractor into an uncertain future, he'll need all the friends he can get.

By Eric Schine in Los Angeles

MANAGEMENT

THE BEST-LAID ETHICS PROGRAMS...

...couldn't stop a nightmare at Dow Corning. What happened?

In Midland, Mich., population 38,000, the downtown is a mere four blocks long. The community boasts a top-rated school district, 58 churches, and two corporate giants: Dow Chemical Co. and Dow Corning Corp. Midland is a law-abiding, God-fearing town, where ethics and values still mean something. That's why allegations that Dow Corning sold faulty breast implants have dominated the talk among early-morning regulars at the Holiday Inn restaurant on Wackerley Road.

What makes the disclosures all the more puzzling is that Dow Corning has long been recognized as a pioneer in cor-

porate ethics. It was among the first to establish an ethics program, which many believe to be the most elaborate in Corporate America. Yet the controversy now swirling around Dow Corning highlights the limitations of such initiatives, and it may serve to remind other companies that even the best plans are no guarantee against lapses.

'SPRAY AND PRAY.' Ethics programs reached nearly faddish proportions in the late 1980s. Business schools added ethics courses. Consultants peddled lectures and seminars. "The rule in ethics was spray and pray," says Mark Pastin, director of the Lincoln Center for Ethics

The Corporation

in Tempe, Ariz. Consultants looked for big companies, asked for big fees, "then sprayed some ethics over them and prayed that something happened."

Dow Corning took a different route. "It was more than just: 'Do good and avoid evil,'" says Kenneth Goodpaster, a former professor at Harvard business school who prepared a trio of case studies on the company. "It was thought by everyone to be a brilliant process."

The system got its start in the early 1970s, in the aftermath of Watergate and the reports that Lockheed Corp. spent millions bribing foreign officials. Dow Corning's chairman at the time, John S. Ludington, sought to create a corporate culture that emphasized high ethical standards. In 1976, he launched a Business Conduct Committee, made up of company executives who report directly to a board committee.

SHINING BEACON. From the beginning, it was an ambitious effort (table). The company immediately began a series of audits to monitor compliance and communicate with employees about ethics. These sessions were to take place at every operation once every three years. Two company training programs included segments on the subject, and Dow

Corning's semiannual employee opinion surveys had an ethics section.

That extensive commitment to ethics was what attracted the attention of Goodpaster, whose case studies on the Dow Corning program have since been hashed over by thousands of MBAs and managers in executive-education classes. One study showed how an early audit uncovered a major Dow Corning distributor overseas who was bribing customs officials to obtain lower duty rates. Many executives left Harvard hoping to

Few will speak out on
moral issues in a big group—
or in front of the boss

establish similar programs in their own companies, Goodpaster says.

The system that so impressed others, however, seemingly failed to pick up any signs of controversy over the safety of breast implants during four separate audits since 1983. Executives from Dow Corning's conduct committee descended on the Arlington (Tenn.) facility of Dow

Corning Wright, the unit that makes silicone implants, for a review in October, 1990. The safety issue didn't crop up during the three-hour audit with nine employees, says Jere D. Marciniak, an area vice-president who is chairman of the conduct committee.

LEAKY NET. Yet as far back as 1976, the same year Dow Corning launched its ethics program, the engineer who sounded an early alarm on the product's safety quit the company in protest. A Dec. 15, 1977, memo from employee Frank Lewis recounted reports by four doctors that 52 of 400 implant procedures had resulted in ruptures. Those and other internal documents suggest that Dow Corning was aware of problems for years and tried to keep the public from learning of them—although the company maintains it has done nothing wrong.

Whatever the ultimate verdict, Goodpaster is incredulous that the ethics program failed to uncover signs of internal dissent. "It's puzzling because those are the kinds of memos and concerns that this audit practice might bring to the surface," says Goodpaster, now a professor at the College of St. Thomas in St. Paul, Minn.

Why didn't it? For the most part, eth-



Just A R

...s programs aren't designed to deal directly with complex problems. Instead, they are there only to help cultivate an overall environment of proper conduct. At Dow Corning, issues of product safety or efficacy typically go through normal management channels. In this case, the concerns surfaced before the company's Medical Device Business Board, which decided to conduct further safety studies. "It wouldn't have been necessary to bring up [the implants' safety] inside a code-of-conduct meeting unless an employee thought the process wasn't working well and wanted to raise the issue," says Marciniak.

MUTED WHISTLES. But some ethicists are now beginning to question whether Dow Corning's program was really as well-designed as they once thought. Boston consultant Barbara Ley Toffler points out that few managers are likely to speak openly about moral issues in a room filled with many employees, includ-

ing one's boss. "You need small groups of about six people, and even then the reality is that someone inside won't talk freely to someone in-house," she says.

Likewise, you won't get many red flags when top managers believe concerns about safety are unwarranted. Dow Corning still argues that the product does not pose an unreasonable risk,

and Keith R. McKennon, who recently succeeded Ludington as chairman, vigorously defends the conduct of the company's managers. "I have a high regard for their sincerity and integrity, and I don't ascribe bad motives to anyone," he says. What becomes of the implant business now is anyone's guess. In early January, a Food & Drug Administration advisory committee issued a sort of split verdict: Implants may remain on the market in limited use, but clinical trials will test their safety. McKennon says he is thinking of abandoning implants, which represent less than 1% of Dow Corning's \$1.8 billion in sales. But there's one part of Dow Corning he has no plans to touch: the ethics program. Although it apparently failed to tip off the company to potentially unethical behavior, says Marciniak, "it still will aid and guide us through this difficult time."

By John A. Byrne in New York, with bureau reports



MARCINIAK: 'IT WILL GUIDE US'

DOW CORNING'S ETHICS SYSTEM

- ▶ Six managers serve three-year stints on a Business Conduct Committee. Each member devotes up to six weeks a year
- ▶ Two members audit every business operation every three years. The panel reviews up to 35 locations annually
- ▶ Three-hour reviews are held with up to 35 employees. Committee members use a code of ethics as the framework and encourage employees to raise ethical issues
- ▶ Results of the audits are reported to a three-member Audit & Social Responsibility Committee of the board of directors

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reminder That We've

'THEY'VE MADE IT A MANHOOD ISSUE NOW'

Rising tensions between GM and the UAW could spark warfare

Late last year, General Motors Corp. asked the United Auto Workers to have its members bunch part of their vacations into two weeks in July. That would let GM shut its plants—and save \$200 million. Stephen P. Yokich, who heads the UAW's GM department, told the company to get his local unions' O.K. Then, GM goofed: It mailed its plea directly to workers, asking each, "as an individual," to grant the company's wish. On Feb. 12, miffed that the union had been

sidestepped, Yokich told GM: No dice.

It's a small spat that reflects a big problem. After two decades of improving relations between the UAW and the

company that employs roughly 25% of its members, the two are suddenly on the worst terms in years. The reasons aren't hard to find. Tensions over GM's anticipated downsizing had been rising before the company's Dec. 18 announcement that it would close 21 plants and eliminate 74,000 hourly and salaried jobs by 1995. Anxiety in the plants had risen to a fever pitch by Feb. 24, when the company finally named 12 of the 21 doomed sites. Frustrated with all that is happening, Yokich is threatening GM with "guerrilla warfare."

"In the long term," says Thomas M. Fricano, director of UAW Region 9 in New Jersey, "everyone will be hurt." GM

A HISTORY OF COOPERATION



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1973 The United Auto Workers win a new Quality of Worklife program that gives workers more voice in factory-floor decisions

1981 GM's Shreveport (La.) plant opens, starting the company's first experiment with multi-skilled teams of workers who have direct input into control of the production process

1983 Two champions of cooperation take charge: Donald Ephlin at the UAW's GM and Alfred Warren, GM's vice-president for human relations

1984 GM and Toyota form joint venture in Fremont, Calif. Toyota institutes a team system that nearly doubles productivity and becomes a model for GM

Been Printing Long

st \$4.5 billion last year, including a \$1.8 billion onetime charge to cover the plant closings. Its core North American auto operations lost more than \$7 billion. To dig out of this hole, GM has to bring its capacity and costs into line with its market share, which shrank 10 points in the 80s, to 35%. But it will also need cooperative workers to boost plant-floor efforts to lift quality and productivity.

Today's assemblers do much more than tighten nuts and bolts. Increasingly, for instance, they help design new products to make them easier to assemble. "If GM can't get its labor relations in order, it's not going to get what it wants out of its plants," says Harley Shaiken, professor of work and technology at the University of California, San Diego.

If that happens, the UAW will suffer,

too. Since 1985, it has lost 127,000 jobs at GM. If the company scraps 54,000 more hourly jobs by 1995, as it currently plans, the UAW's ranks there will shrink to 250,000 workers—a 43% reduction in 10 years. The union's overall membership will slip below 800,000, vs. a million in the mid-1980s. "They're losing more members than the total at many labor unions in the U.S.," says Sean MacLinden, a labor expert at the University of Michigan.

SLIM HAUL. To offset such losses, the UAW would have to spend millions on organizing drives. Over the past decade, it has been aggressively branching into service industries, where it has netted 125,000 new members. Still, the UAW's continued shrinkage will erode its considerable political clout. That could make

it a less effective lobbyist against such proposals as the U.S.-Mexican free-trade pact, whose enactment could entice employers into sending thousands of UAW jobs south of the border.

The UAW-GM tensions sharply reverse a long-term warming of relations. In the early 1970s, UAW leaders urged GM to combat the boredom and alienation of its workers by giving them more say over their work. By the 1980s, GM was getting religion. In some plants, it set up semi-autonomous work teams of the type that had given Japanese auto makers an edge. But even the noblest experiment could not offset the effect of GM's decline in market share. And in the past several months, that effect has been severe.

The friction started with job security.

During the 1980s, GM paid for the UAW's cooperation with some of the most sweeping provisions in any industry. Jobs could disappear, but workers had to be kept on the payroll, sometimes for years. As the recession deepened, however, GM continued to shift UAW work to outside suppli-

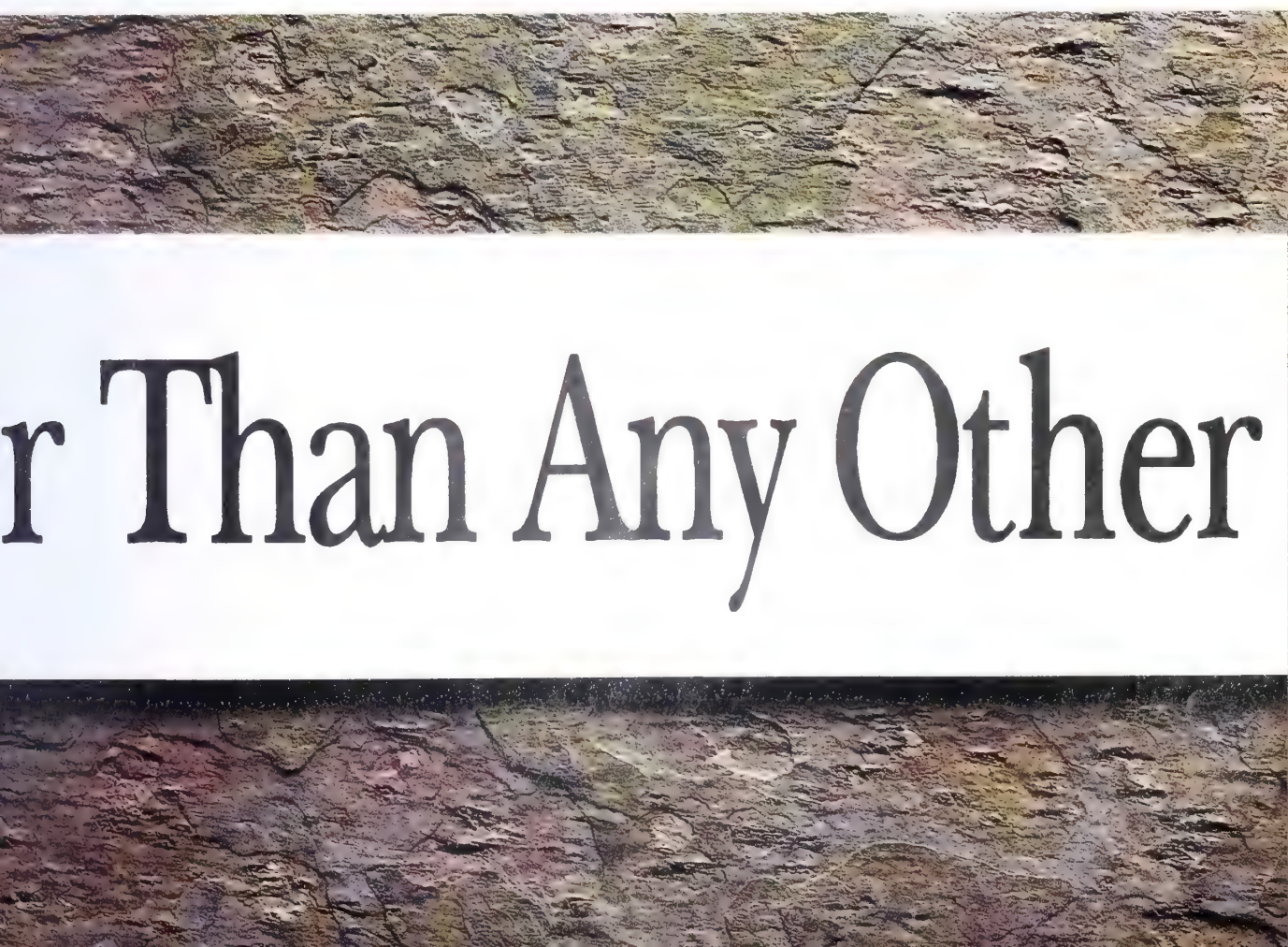
5 Led by Ephlin and Warren, GM and the UAW reached a revolutionary labor agreement for Saturn's small-car plant in Spring Hill, Tenn. Union members have a voice in nearly every management decision

1988 New Directions, a UAW dissident group headed by Jerry Tucker, lashes out at cooperation. Tucker argues that it undermines the UAW's strength

1989 GM closes four assembly plants, skirting a contractual prohibition. Ephlin retires under pressure. He's replaced by the more combative Stephen Yokich

1990 GM signs a three-year deal to pay many workers even if their plants close

1991 GM, battered by the recession, announces 21 plant closings and says it will eliminate 54,000 union jobs by 1995. UAW leaders accuse GM of playing to Wall Street and pitting local unions against each other



r Than Any Other

ers, even though the current labor contract calls for slowing the trend. The politically aware Yokich reacted.

DIVISIVE TACTICS. Since last fall, the UAW has threatened nine local strikes and mounted three—as it has the right to over issues such as contracting out. One stand-off, at two Dayton parts plants, ended in a three-day walkout that disrupted work at other factories. Then, in January, UAW President Owen F. Bieber rejected GM's informal request to reopen the 1990 contract, which set up a \$4 billion wages of almost all laid-off which hadn't anticipated of this money, wanted drain. The rejection r with the vacation fiasco challenged Yokich to see his people," says a "They've made it a man



YOKICH IS INCENSED OVER THE WAY GM HANDLED LAYOFF ANNOUNCEMENTS

Yokich is also angry over the way GM has handled its layoff announcements. By not saying in December which plants would close, it pitted locals against each other. Those at underused plants scrambled to offer concessions. GM Chairman Robert C. Stempel heightened the whip-sawing on Feb. 24, when he made it clear that some plants are staying open

partly because of such deals.

A case in point: GM will shut its assembly plant in Ypsilanti, Mich., and leave open a plant in Arlington, Tex., that makes the same cars. Arlington workers agreed to discuss working three shifts instead of two, while Ypsilanti workers didn't. Speaking of a different plant that had accepted such changes, Stempel said, "That and some other innovations will make the plant very productive and really helps its future outlook."

CEMENTS The souring labor relations have been exacerbated by a personality clash between Yokich and Richard F. O'Brien, GM's vice-president for industrial relations. The two never hit it off after O'Brien took office a year ago. Insiders say Yokich hasn't visited GM's headquarters in more than six months in stark contrast with the friendship he forged with O'Brien's predecessor, Al

Laser Maker.

ed S. Warren. O'Brien has been dis-
acted by the need to care for a son
who was badly hurt in a car accident.
at Yokich's combative rhetoric doesn't
elp. "I'm willing to take a little of the
ame," he says.

ELECTION HISTORIONICS? Meanwhile,
ion politics is adding fuel to the fire.
ne UAW's top officers face reelection at
e union's national convention in June.
ere's no real chance that they'll be
seated, but a dissident, Jerry Tucker,
running against Bieber (box). And Yo-
ch, who aspires to the presidency when
ieber retires in 1995, is playing to mem-
bers more than usual.

Stempel will find it hard to repair the
ft. In recent years, GM has repeatedly
anged plans for which models to pro-
uce where. And workers have learned
at accepting more flexible work rules
keep a plant going doesn't mean the
ant will stay open.

"This sure as hell sets back our ability
work together," fumes Bruce Lee, di-
ctor of UAW Region 6 in California and
strong advocate of cooperation. And
at pattern may continue for the fore-
seable future: Stempel has seven more
osings to announce. He said on Feb. 24
at some may not be disclosed until
ext year.

By David Woodruff in Detroit

THE THORN IN OWEN BIEBER'S SIDE

This is an election
year for the United
Auto Workers, and
like any dark-horse candi-
date, Jerry Tucker is snip-
ing at the incumbent,
President Owen F. Bieber.
"We have seen an era of
massive job losses," he
told a small group of sup-
porters outside the UAW's
Detroit headquarters in
January. "Our leaders are
trapped into a strategy
that won't work."

Tucker, 53, has little chance of win-
ning at the union's June convention.
Still, he has UAW leaders worried. In-
siders say that prior to General Motors
Corp.'s Dec. 18 decision to close 21
plants, the company asked Bieber and
Stephen P. Yokich, who heads the
UAW's GM department, to help decide
which plants should go. Sources say
Bieber decided not to, in part because
of pressure from Tucker and his fellow
dissidents, who call themselves the
New Directions movement.



**TUCKER: PUSHING FOR A
MORE COMBATIVE STANCE**

Tucker's power has
slipped since the union's
last convention in 1989.
Back then, he lost the
race for director of the
union's Region 5, which
bumped him off the UAW's
executive board. Yokich
has since undermined
Tucker by taking a simi-
larly combative stance
with GM. This, plus the
rich wage guarantees Yo-
kich won in 1990 bargain-
ing at GM, has lured back

a key New Directions supporter:
Donny G. Douglas, president of UAW
Local 594 in Pontiac, Mich. Concludes
former UAW President Douglas A. Fra-
ser: "Steve sort of defanged them."

That victory may not mean much in
the long run, however. While UAW lead-
ers vie with Tucker over who can be
tougher with GM, many locals aren't in
a fighting mood: They're falling all
over themselves to grant concessions
they hope will keep their plants open.

By David Woodruff in Detroit

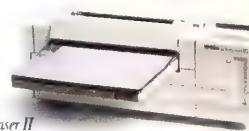
The Epson Laser Printer Line. This could be the longest argument yet for buying an Epson® laser printer. And
a rather compelling one at that.

Not only because Epson invented the computer printer, but because more people use our printers than
any other brand in the world. Which should tell you something about the quality of the products
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introduction to laser printing. Our powerful EPL™-7500, rated *PC World's* "Best Buy" among Adobe®
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to three users—without a network or switchbox.

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the longest running name in printers.

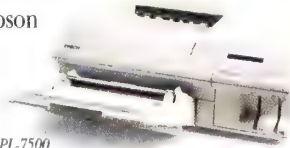
We could go on and on. But we'll leave that to your Epson dealer. For the name of the one nearest
you, call 800-289-3776.



The ActionLaser II



The New EPL-8000



The EPL-7500

EPSON



Desktops



Dot Matrix



Notebooks



Lasers



Servers

WE WERE SO FAR AHEAD
WE HAD TIME TO STOP
(WE THOUGHT WAXING



Smart people always read the fine print. And they always wear their seat belts. Photo is a reenactment of the actual event.

T 24 HOURS OF DAYTONA, AND WASH THE CAR.

OULD BE A BIT ARROGANT.)



At this year's 24 Hours of Daytona not only did Nissan's racing team set two records, but we also managed to lap our nearest competitor nine times. Giving us ample opportunity to make sure our car looked presentable at the finish line.

How we built such a lead speaks to the kind of fanatical attention to detail needed to win this country's most grueling 24-hour race. A race infamous for knocking out contenders with simple failures like a thrown bearing or a loosened bolt.

For 2712 miles everything had to work perfectly. And it did.

Now while you may not have a few hundred thousand dollars lying around to drop on a racing vehicle, rest assured we put that same kind of commitment into vehicles you can afford. Working to make sure each car runs as well on its 100,000th mile as it did on its first.

Of course we also believe it's very important our cars look their best... wait a minute, is that a bug on the windshield?



BUILT FOR THE HUMAN RACE.

HAS CHICAGO LOST ITS EDGE?

Foreign exchanges and swaps are muscling in on the pits

Dec. 10, 1991, was a gala day at the Chicago Board of Trade. George Bush became the first U.S. President to ring in a trading session on a commodities exchange. It was an exhilarating gesture for an industry that has been beset by scandal and pummeled by foreign competition and off-exchange products. "This is what it's all about," Bush shouted above the din of cheering traders. "This is what we need in this country: We need free enterprise." A month later, however, the President decided we need something else: a 15¢ tax on every futures trade.

In Chicago, where 85% of the nation's futures contracts change hands, the proposal—for a levy of almost three times the exchanges' own fees—was a cruel slap in the face. The idea was put on the back burner, but the symbolism remains potent. Chicago is under siege.

The Chicago exchanges were a hot-house of financial innovation throughout the 1970s and early 1980s. They developed futures and options that shield companies from currency fluctuations and interest-rate risks and give money managers myriad ways to hedge against stock market declines. But the days of cutting-edge advances are gone. Today, the CBOT and its crosstown rival, the Chicago Mercantile Exchange, are seeing their days of preeminence fade fast.

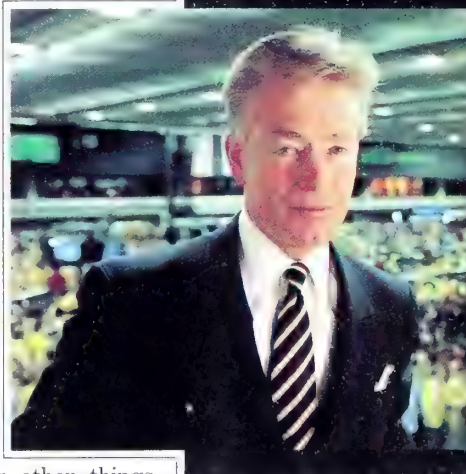
FRESH THREAT. Over-the-counter futures products, notably currency and interest-rate swaps, are luring business from Chicago (charts). Foreign exchanges have seen their market share zoom from 18% in 1984 to 43% in 1991. And Globex, Chicago's after-hours trading system, has been delayed for three years while overseas bourses flourished.

To an extent, Chicago's decline was an inevitable outcome of the growth of foreign markets dealing in local instruments. The exchanges can hardly be faulted for that. Observes Merc Chairman John F. Sandner: "We

cannot reach all the corners of the world in any reasonable period of time."

But it hasn't helped that Chicago has fallen behind in its traditional *raison d'être*—new products. The city's last hot product, the Standard & Poor's 500-stock-index future, came on the market a decade ago. Since then, the exchanges have produced a succession of losers, such as futures in broiler chickens and Japanese government bonds. CBOT President Thomas R. Donovan draws a parallel between the futures industry today and the railroads years ago, when first confronted by air travel. "They were satisfied being railroads," says Donovan. "They didn't diversify. They didn't grow."

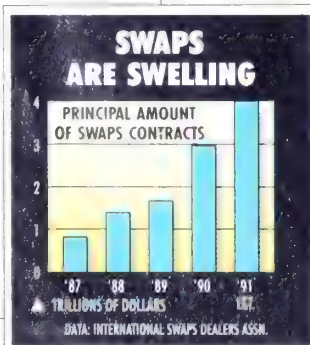
IN THE DUST. Growing at a 34% annual clip, foreign exchanges have cordoned off large sectors of the financial futures market, from German government bonds to Japanese stock indexes. Last year, they claimed 10 of the world's 25 most active contracts. Overseas exchanges have lured capital from domestic exchanges because, among other things, they are not dominated by the computerized trading systems that have squeezed the profits in the U.S. Many bourses also offer an innovation that has long left Chicago in the dust—electronic trading. Not since the 1985 opening of the *Marché à Terme International de France* (MATIF) has a new exchange offered only pit-style "open outcry" trading. Such highly successful exchanges as the two-year-old Deutsche Terminbörse in Frankfurt and the Tokyo International Financial Futures Exchange, established in 1989, are automated. Such trading



■ Erosion likely to continue. Says Merc Chief Sandner: "We cannot reach all the corners of the world in any reasonable period of time."

accounts for 15% of world volume, vs. only 0.2% as recently as 1987.

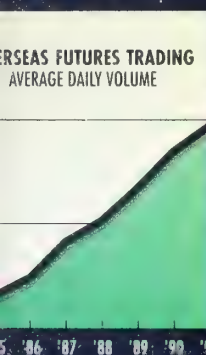
Globex is Chicago's response to the foreign threat. It will match buyers and sellers electronically after the futures pits are closed. The idea is to keep overnight trading in Chicago and to draw business back from such overseas bourses as Tokyo, which trades U.S. Treasury futures long after the sun has set on the prairies. A great idea—in theory. In practice, Globex has stumbled badly. To design the system, the exchanges chose as their partner Reuters Holdings PLC, which had prior experience selling information but not creating trading systems. "Their software is old," complains one Merc member who has worked extensively on the Globex proj-





■ With floor brokers often netting less than \$1 per contract, trading operations are hard-pressed just to break even

FUTURES ARE LOADING OVERSEAS...



▲ MILLIONS OF CONTRACTS TRADED

...WHILE U.S. TRADING HAS PEAKED...



▲ MILLIONS OF CONTRACTS TRADED
DATA: CHICAGO BOARD OF TRADE, NATIONAL FUTURES ASSN.

...AND U.S. FIRMS ARE FEELING THE PINCH



▲ NUMBER OF FIRMS

"It's just not state-of-the-art." Such sentiments are vigorously denied by Globex officials. "The entire system performed beautifully," says Donald Sereno, a Merc senior vice-president and a Globex official.

BUFFINGSTOCK. Still, repeated delays have cost the system confidence among traders. Just last fall, as the latest start-date approached, Globex switched to a larger computer, delaying the start yet again. Development costs have bumped up to the \$70 million range, three times original estimates, sources say. Traders state that when people ask when Globex will start up, the answer is always "May—or may not." Concedes CBOT chairman William F. O'Connor: "Globex is proceeding according to schedule.

Whose schedule, I'm just not sure."

Perhaps the joking will end soon. On Jan. 29, Globex was put to a successful test that may clear the way for a fall debut. Predicts Globex Chairman Leo Melamed, the father of the financial-futures markets: "Globex will be launched this year, and Globex will protect our markets."

But will it? With a panoply of exchanges trading around the globe, investors may well ignore Globex and use other, more liquid marketplaces during their daytime trading hours. "At 8 a.m. in Tokyo, the big trading firms aren't going to put positions on a screen originating from Chicago," says the head of one large brokerage firm. Another top futures honcho, Max C. Chapman Jr.,

chairman of Nomura Securities International Inc., says the repeated delays have fatally wounded Globex. "It's not going to be a savior," says Chapman. "It's not going to be a factor at all."

Even as the Chicago exchanges plan to take the offensive with Globex, they're stuck playing defense in the battle against over-the-counter trading. It goes by a variety of names—swaps, collars, floors, "swaptions," and OTC equity derivatives. Whatever the moniker, they are futures-like products, custom-tailored by financial firms to help corporate customers guard against the risk of currency fluctuations, interest-rate shifts, or stock market moves. Since 1987, swap volume alone has more than tripled (chart).

In a typical interest rate-swap, two parties exchange interest payments. That might come in handy for, say, a bank that gets an income stream from fixed-rate mortgages while paying deposit interest that moves with short-term rates. The bank would "swap" its fixed-rate revenues for income tied to short-term rates, in order to balance outlays and income. Before the advent of custom-tailored swap contracts, banks would have had to buy or sell interest-rate futures in Chicago, which would not have met their needs quite so precisely.

MORE RULES. As demand grows, major banks and brokerages are pouring huge chunks of capital into swaps. Chicago gets little out of it, because most swap dealers hedge against risk by buying or selling swap contracts instead of futures. Nomura Securities Co. recently set up a Nomura Options International unit to handle OTC dealings in the U.S., Tokyo, and London. And Bankers Trust Co. is investing a large share of its \$350 million in technology enhancements each year in its swaps trading systems. "The futures exchanges will remain viable," predicts Scott P. George, managing director of BT Securities Corp. "However, the relative importance of the exchanges against the overall market will decline dramatically."

The Merc has added longer-term expirations to its Eurodollar contract to compete with interest-rate swaps. But it's tough to compete with such custom-tailored products, so futures executives are turning for help to the Commodity Futures Trading Commission. They have tried to subdue the swaps business by asking the CFTC to declare that swaps are futures contracts and thus under CFTC purview.

An appeal for more regulation seems odd for the exchanges, which for years have beefed about regulatory excess. From new product introductions to trad-

ing rules to capital requirements, the exchanges have complained about their chief regulator. In one oft-cited instance, the Merc in 1985 applied to trade futures on the Nikkei 225-stock index. Regulators insisted that the exchange win cooperation from the Tokyo Stock Exchange. By the time that happened, in 1987, Tokyo had launched a Nikkei 225 contract of its own. Today, it's the world's most successful stock-index future.

Such dramatic examples of overregulation are rare. Instead, the industry complains that regulation bleeds it with small cuts. Applications for new contracts take at least a year for approval, while foreign exchanges often have no formal approval process. With stringent U.S. capital standards, firms trading on domestic exchanges must tie up far more money than they do when trading overseas. CFTC Chairwoman Wendy L. Gramm is sensitive to complaints of

overregulation but says: "It's too easy to find some kind of scapegoat, like 'the costs are less elsewhere.'"

The exchanges in recent months have been loosening their rules. They have reduced position limits in Eurodollar futures and inaugurated a new large-order execution rule in the Merc's S&P 500-stock-index futures pit to facilitate block trading. The exchanges are considering combining clearing operations to streamline processing and cut costs. They're also beefing up their trade-tracking systems to boost investor confidence.

'ROCK BOTTOM.' But such efforts may be too little, too late. For many futures firms today, mere survival is a challenge. With floor brokers often netting less than \$1 per contract, trading operations are hard-pressed just to break even. Firms that typically saw returns on equity top 30% during the early 1980s, watched average ROE dip to below

7% through the first three quarters of last year. Nearly a third of the firms lost money. The ranks of U.S. futures trading firms have fallen by 20% since 1987 (chart, page 77), with such old-line outfits as Shatkin Trading, Stotler, and Clayton Brokerage dropping from sight. Firms are turning to bank borrowings and note offerings to shore up their capital. Says Z. Lou Guttman, chairman of the New York Mercantile Exchange: "Firms have hit rock bottom."

For every loser in the futures pits there is a winner. And so it is in the global futures markets. While the Chicago exchanges have been taking it on the chin, the overseas and swaps markets are soaring. If Chicago does not rekindle its old innovative fire, futures trading will continue to flourish—elsewhere.

By David Greising in Chicago, with Dean Foust in Washington, Ted Holden in Tokyo, and Mark Maremont in London

FUTURES SHOCK: HOW FRANKFURT GOT SO FAR, SO FAST

For Chicago's beleaguered futures exchanges, the Deutsche Terminbörse is still too small to pose a competitive threat. But the trend that it represents—innovation, growth, and sympathetic regulation—is potent stuff.

The Frankfurt futures and options exchange is booming. The DTB is one of the first fully computerized bourses in Europe, and it has been pulling in business like a giant electronic vortex—almost too fast for its mainframe Digital Equipment Corp. computer to keep up logging trades. Since opening up two years ago with an options contract on 14 leading German stocks, the DTB has added seven more products, boosted its staff from 10 to 120 and its membership from 52 to 75, and is now moving more than 120,000 contracts a day. Trading in its key product—futures on long-term German government bonds, or "Bunds"—has zoomed in one year from 3,000 contracts a day to 24,000.

BIG EXPANSION. The 17 major German banks—the DTB's founding members—are hell-bent on fast expansion. In August, the DTB lifted the fee it was charging on each \$150,000 Bund futures contract. That cost the bourse \$1.6 million in lost fees—but the sum



DTB'S FRANKE: THE TERMINBORSE MOVES 120,000 CONTRACTS A DAY

was more than paid back from fees from other contracts, as volume surged. Last fall, German banks began to bring their Bund futures trading home to the DTB from London. "We looked thoroughly at our costs and saw that we could do business almost for half the price in Frankfurt," says Gerhard Eberstadt, a managing board member who runs securities trading at Dresdner Bank. Another of the DTB's selling points is speed. An order can be executed by DTB in two seconds. "On the [London exchange], this used to take at least 10 seconds," says Ralf Lemster, a trader at Dresdner Bank.

With business booming, the ex-

change needs all the speed it can get to cope with new investors and new products. For example, a futures contract based on three-month money-market paper is likely to start before the end of the year. A recent change of legislation allowed German insurance companies to invest in futures and options. This has added a huge investment potential to the market and reflects a growing sophistication among German investors in dealing with derivatives. "Germans were late to start catching up, but they're catching up fast," says DTB President Jörg Franke.

But he admits the exchange's growth is limited. "Our software and hardware capacity are still too weak," says Franke, who believes system capacity will be exhausted at about twice current levels. So the DTB has a long way to go to overtake London, where most Bund futures contracts are traded. And the exchange faces another challenge—from over-the-counter trading. "We can't customize products the way OTC trade does," complains Franke. "We have to convince our members to deal through us instead of around us." That is, of course, one of the same challenges facing Chicago.

By Igor Reichlin in Bonn

JUST HOW TIDY WERE MERRILL'S JUNK DEALS?

As the SEC looks into alleged scalping, parking, and front-running

The rash of securities crimes over the last several years has touched most of the major investment firms. A notable exception is Merrill Lynch & Co., whose well-regarded compliance department has kept the country's largest brokerage house virtually free of serious taint.

That could change soon. BUSINESS WEEK has learned that the Securities & Exchange Commission and the U.S. Attorney's Office for New York's Southern District are investigating Merrill's junk sales and trading department, looking for such possible violations as "front-running," or trading ahead of customers; "scalping," promoting issues after acquiring positions; and parking.

Last September, Merrill fired two vice-presidents on the junk desk, Edward N. Scherer and Richard Kursman. Merrill said they were terminated for "mishandling a customer account," an "isolated incident." Yet according to BUSINESS WEEK's sources, who have knowledge of the inquiry, wrongdoing may have been more systematic. The firm has made changes in compliance procedures. On Feb. 26, Merrill announced the retirement of Brian M. Barefoot, the managing director who headed the junk desk. "Merrill enjoys the best reputation for compliance, but not in junk bonds," says a source familiar with the probes. "The firm has some serious issues to confront with the junk-bond desk."

LEGAL FRONTIER. Merrill says its internal review found no evidence at anyone other than Scherer and Kursman, who are said to be cooperating with prosecutors, were involved in wrongdoing. "We are the victim and hopefully won't be blamed for what has happened, because we have acted promptly," says a Merrill spokesman. Lawyers for Scherer and Kursman had no comment. Barefoot couldn't be reached. The SEC and the Justice Dept. declined to comment.

Even if the government's suspicions are true, it's far from certain that such conduct violates the law. Front-running, scalping, and parking can be illegal when stocks are involved, but the law is murky when applied to junk.

The possible front-running infractions, according to BUSINESS WEEK's sources, involve evidence that Merrill junk employees may have routinely purchased junk bonds for their own accounts shortly before the distribution of internal analyses of junk issues, which sometimes are circulated to outsiders. Sources say the trading could have involved Interco, Federated Department Stores, Greyhound, and MCorp. Scherer and Kursman are said to have made some 20 such trades over a 10-month period. In one instance, Merrill junk employees purchased \$5 million of Interco's 13.75% senior subordinated debentures at about 11¼ last July, a few days before the release of the favorable analysis on Interco's debt. After it circulated, the bonds more than doubled, to 24.

Merrill says that after it fired Scherer and Kursman, it found other high-yield employees had bought Interco debt "in approved transactions." But because of Interco's quick runup, the firm "adjusted downward" the price paid by nine institutional customers "to avoid any appearance of impropriety." The firm says it found no trading by junk employees in

Greyhound or Federated bonds, and that the only employee who bought MCorp. debt was one of the two who were fired. Sources say Scherer and Kursman did not secure approval for their trading and traded through an outside accomplice.

EARLY BIRDS? Prosecutors are also looking into whether Merrill's junk employees engaged in scalping. According to sources, the employees bought junk bonds, then promoted them to customers based on positive reports. They sold after customer purchases pushed up prices. John C. Coffee, a securities-law professor at Columbia University's law school, says such conduct could be considered illegal if the reports or the employees' characterization of them to customers were overly optimistic or false.

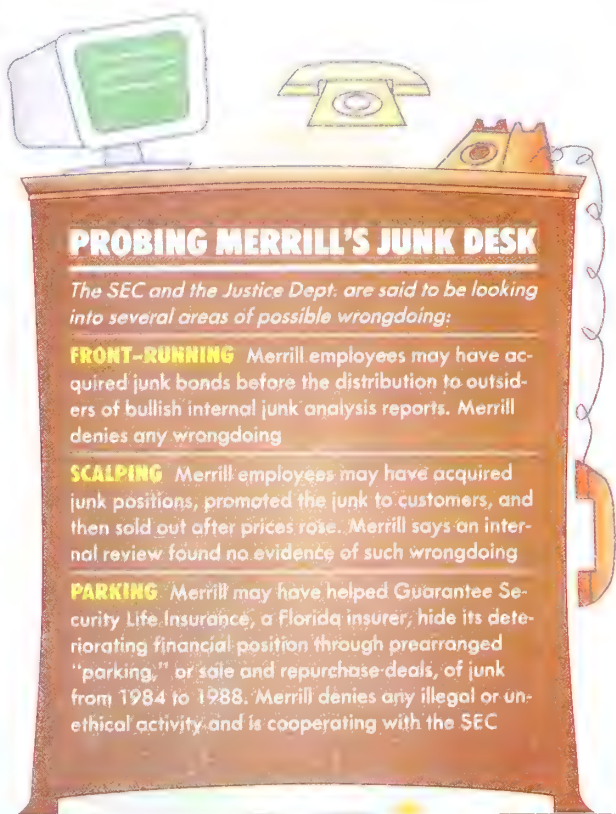
Elsewhere, the SEC is said to be probing whether Merrill junk employees helped a now-insolvent Florida insurer, Guarantee Security Life Insurance Co., to disguise its deteriorating condition by engaging in illegal securities parking. Last Dec. 20, the Florida Insurance Dept., Guarantee's receiver, sued Merrill, Richard Allerton, a managing director in its junk department, and others. The suit details some of the transactions said to be under scrutiny by the SEC and Justice. On Mar. 18, a Senate subcommittee probing insurance fraud is set to hold hearings on Guarantee. Merrill denies any illegal or unethical activity and is cooperating with the SEC.

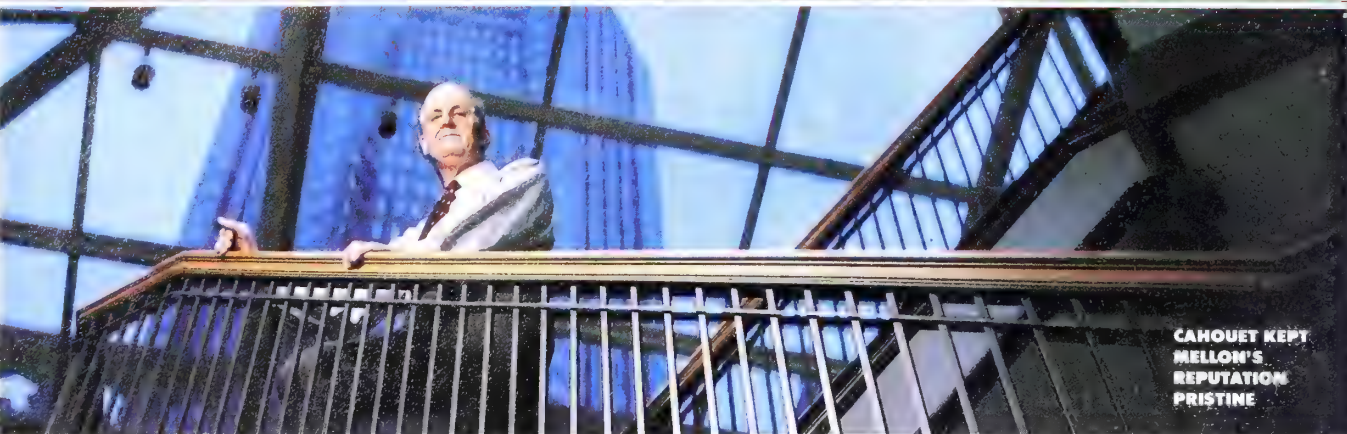
The Florida suit alleges that Merrill helped prop up Guarantee with "phantom" year-end transactions in 1984, 1985, 1986, and 1988 that looked on the books like sales of junk bonds by Guarantee to Merrill in exchange for U.S. Treasuries. The purported trades removed the junk—which required the insurer to set aside a reserve totalling 20% of the junk bond's value—from Guarantee's balance sheets. In its place: Treasuries that required no such reserve. The transactions were reversed early the following January, the suit alleges. Allerton, it asserts, issued confirmation slips to fit the bogus trades. Allerton left the firm on Dec. 31.

Merrill and Allerton are fighting the suit. The firm and Allerton's lawyer, Charles A. Stillman, insist that Allerton's departure was voluntary and unrelated to Guarantee.

Even if Merrill avoids charges relating to Guarantee and really was a victim of two rogue employees, its sterling compliance reputation will still need some polishing.

By Michele Galen and Leah Nathans Spiro in New York





**CAHOUE KEPT
MELLON'S
REPUTATION
PRISTINE**

BANKING

RICH BANK, POOR BANK: MELLON'S SURPRISE SUCCESS

Handing over bad loans to a separate ad hoc bank worked like a charm

Skeptics abounded in 1988 when Frank V. Cahouet, chief executive of Mellon Bank Corp., came up with a novel way to deal with the \$1.4 billion in bad loans that were battering the proud Pittsburgh institution. Cahouet planned to dump Mellon's lousy assets into a new bank created to dispose of them. In a stroke, the move would enable Mellon to begin a new life as a healthy bank. Fellow bankers scoffed. Even regulators balked. Cahouet never wavered. "You never get anything done that's particularly progressive without some people challenging you," he recalls.

Now, four years later, Cahouet's "bad bank" gamble has paid off handsomely. Last month, Mellon reported 1991 net earnings of a record \$280 million, up 61% from the previous year. This year, profits could top \$300 million (chart). And Grant Street National Bank, as the bad bank is called, has only a handful of bad loans left, the bulk of its job completed five years earlier than projected.

COPYCAT. That has silenced most critics. If it weren't for Grant Street, says one regulator, "there's some real question in my mind as to whether Mellon would have made it." Mellon's strategy is also seen as a blueprint for dealing with bad loans. BankAmerica Corp. is already copying the plan. "I think if you have the right franchise and you have the right management that is credible with the financial world, you can do other types of Grant Streets," says Cahouet.

When Cahouet, the former CEO of Crocker National Corp., took over Mellon in 1987, he knew it needed a bold

strategy to recover. Anxious to rank with the big money-center banks, Mellon executives had piled on super-risky loans to the oil patch, real estate developers, and Latin America. Instead, Mellon was facing an \$844 million loss for the year, the first ever for the patrician bank founded by Thomas Mellon in 1869.

Cahouet replaced top management and cut the work force. Grant Street, however, was the mainstay of his turnaround plan. By putting bad assets into a separate bank, he instantly purged Mellon's balance sheet. Mellon, which became known as the "good bank," would be rid of the financial drag and distractions created by bad loans. And Cahouet could preserve Mellon's reputation as a solid, blue-blood institution.

Launching Grant Street was something of a gamble. Its capital came from several sources. Michael R. Milken of Drexel Burnham Lambert Inc. sold more than \$500 million in bonds, more than half of it junk. The investment firm of E. M. Warburg, Pincus & Co. paid \$175 million for Mellon convertible preferred stock, almost \$128 million of which Mellon then contributed to Grant Street in return for that bank's preferred and common stock. The common shares were subsequently spun off to Mellon stockholders.

Located just across its namesake street from Mellon headquarters, Grant Street opened in October, 1988. It paid \$577 million, or 41¢ on the

dollar, for Mellon's bad assets. The plan was that Grant Street would be able to sell the bad loans for enough money to pay interest on and eventually redeem its debt and preferred stock.

TICKING METER. Initially, shareholders and Wall Street analysts complained the plan would dilute Mellon shares. Indeed, after converting its preferred shares, Warburg Pincus now owns about 16% of Mellon. Cahouet, however, argued that a clean balance sheet ultimately would boost Mellon's stock.

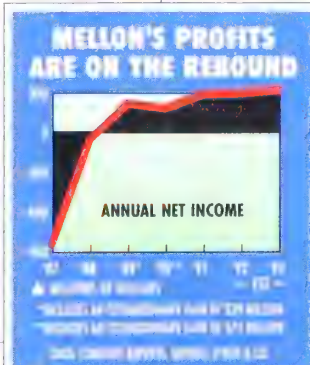
That depended on Grant Street moving quickly. With bonds bearing 10.25% and 14.25% interest and preferred stock yielding 17%, "the meter was ticking very loudly," says William B. Eagleson Jr., an ex-Mellon chairman who came out of retirement to oversee Grant Street.

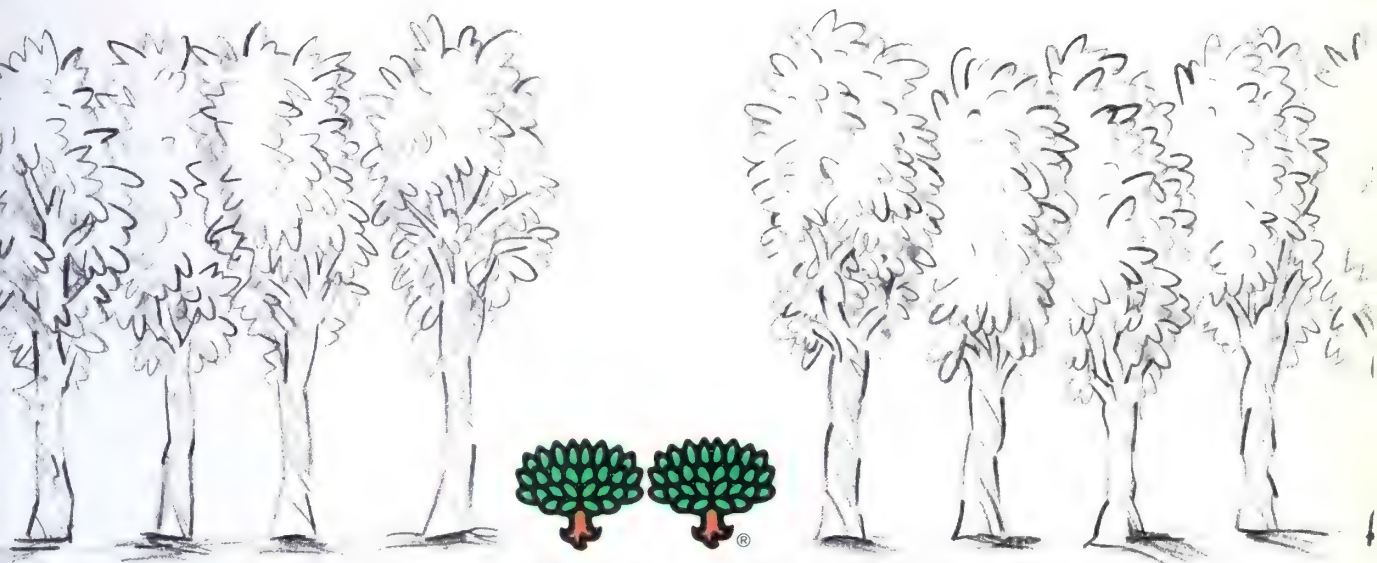
The bad bank and its 75 workout specialists proved adept at unloading sorry loans and properties. Cut-rate prices helped. On Jan. 29, Grant Street redeemed the last of Mellon's preferred stock and announced it had done away with all but about \$15 million in bad assets. It has a similar amount in cash that will be paid to Mellon shareholders.

While Grant Street was grappling with bad loans, Cahouet was virtually reinventing Mellon. He has shifted its focus from corporate to consumer banking. Thanks to acquisitions such as last December's \$88 million purchase of United Penn Bank in Wilkes-Barre, Mellon has 383 branches throughout Pennsylvania. Cahouet is also expanding Mellon's huge data processing business.

With that kind of record, even lingering skeptics are being forced to credit Cahouet with a remarkable turnaround. There's no question that without its bad bank, Mellon's problems would have been a lot worse.

By Maria Mallory in Pittsburgh





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BY GENE G. MARCIAL

WITHOUT JEFFERIES, JEFFERIES SURE HAS BOUNCED BACK

When you think of brokerages, Jefferies Group may be the last name that comes to mind. But institutions know Jefferies: It's the firm pros call when they want to buy or sell large chunks of shares quietly. Now, some of these major players are buying shares of Jefferies.

Why the interest? "We think Jefferies is very undervalued," says a partner at an investment firm that has acquired a stake of over 5%. "It's well-capitalized for a broker, and its earnings are on the rise."

Investors had shied away from the stock after founder and previous Chairman Boyd Jefferies pleaded guilty in 1987 to insider-trading charges. Jefferies resigned and sold his shares, and the firm has slowly recovered.

In the so-called third market, Jefferies provides liquidity by trading Big Board stocks among institutional investors away from the exchange. And Jefferies is building a fourth market through its proprietary electronic-trading systems. The company operates a network known as POSIT for the U.S. and European stock markets and also runs QuantEx, a portfolio-tracking and management system for institutions.

"Both are part of a growing collection of off-exchange, computer-based trading systems," says analyst John Keefe of Lipper Analytical Securities. He figures POSIT handles some 3 million shares a day and QuantEx about 1 million. Jefferies' electronic systems are used mainly by "quantitative" money managers whose institutional portfolios include "indexed" funds that attempt to replicate the stocks in stock market averages, such as the Dow Jones industrial average or the Standard & Poor's 500-stock index.

EARNINGS SURPRISE? This fourth market turned a profit this year and will be a "significant bottom-line contributor next year," says Jefferies' President Frank Baxter. That's why some insiders think earnings this year and next will exceed expectations. Analyst Perrin Long of First Michigan expects 1992 earnings of \$1.85 a share and about \$1.70 next year. "Those are way too low," says a Jefferies insider, "based on the business we have been seeing so far this year." The corporate

JEFFERIES GROUP: PUTTING ON MUSCLE



finance and junk-bond trading it has added to its operations are profitable.

One big investor argues that Jefferies is less sensitive than other brokerages to market or economic ups and downs. So while other brokerage stocks have pulled back after rallying to highs late last year, Jefferies has continued to climb, to 15 from 9 in mid-December. Even after that rise, Jefferies is selling below its book value of \$17 a share and trading at a modest price-earnings ratio of 8.2. This pro expects the stock to double over the next 12 to 18 months. He notes that several insiders have been buying, including Baxter, who already owns 9.1%.

A SCANNER MAKER WAL-MART LIKES

Most investors have yet to react, but some smart-money players are licking their chops over Telxon, a producer of handheld computerized scanners. They've helped push the stock up to 22. These pros think the product that retailing giant Wal-Mart Stores has just ordered from Telxon for some of its outlets will become, before long, the standard scanner system for most retailers.

"Telxon has the lead in the fastest-growing segment of bar-code scanning," says Mitch Kuflik, research director at Brahman Securities. The wireless handheld devices communicate over a radio frequency with a store's central computer. They can be used as portable cash registers or for performing order entry, inventory control, and document-tracking.

Telxon will supply Wal-Mart with its

PTC-960 microcomputer and Dataspan 2000 Spread Spectrum wireless communication network. The microcomputer has a laser scanner, using microprocessing and wireless technologies.

Kuflik figures the initial Wal-Mart order will add some \$30 million to revenues in the year ending Mar. 31, 1993, for a total of \$260 million, up from an estimated \$213 million in fiscal 1992. He thinks earnings will rise to \$1.50 a share in fiscal 1993 from an estimated \$1.12 in 1992. "The Wal-Mart order is just the beginning," says Kuflik.

Other analysts agree. David Nelson of Lehman Brothers says Telxon will benefit from an expected cyclical updating of equipment at the nation's big retailers. He adds that Telxon's stock doesn't reflect the company's growth prospects. One big investor is betting the stock will double in a year.

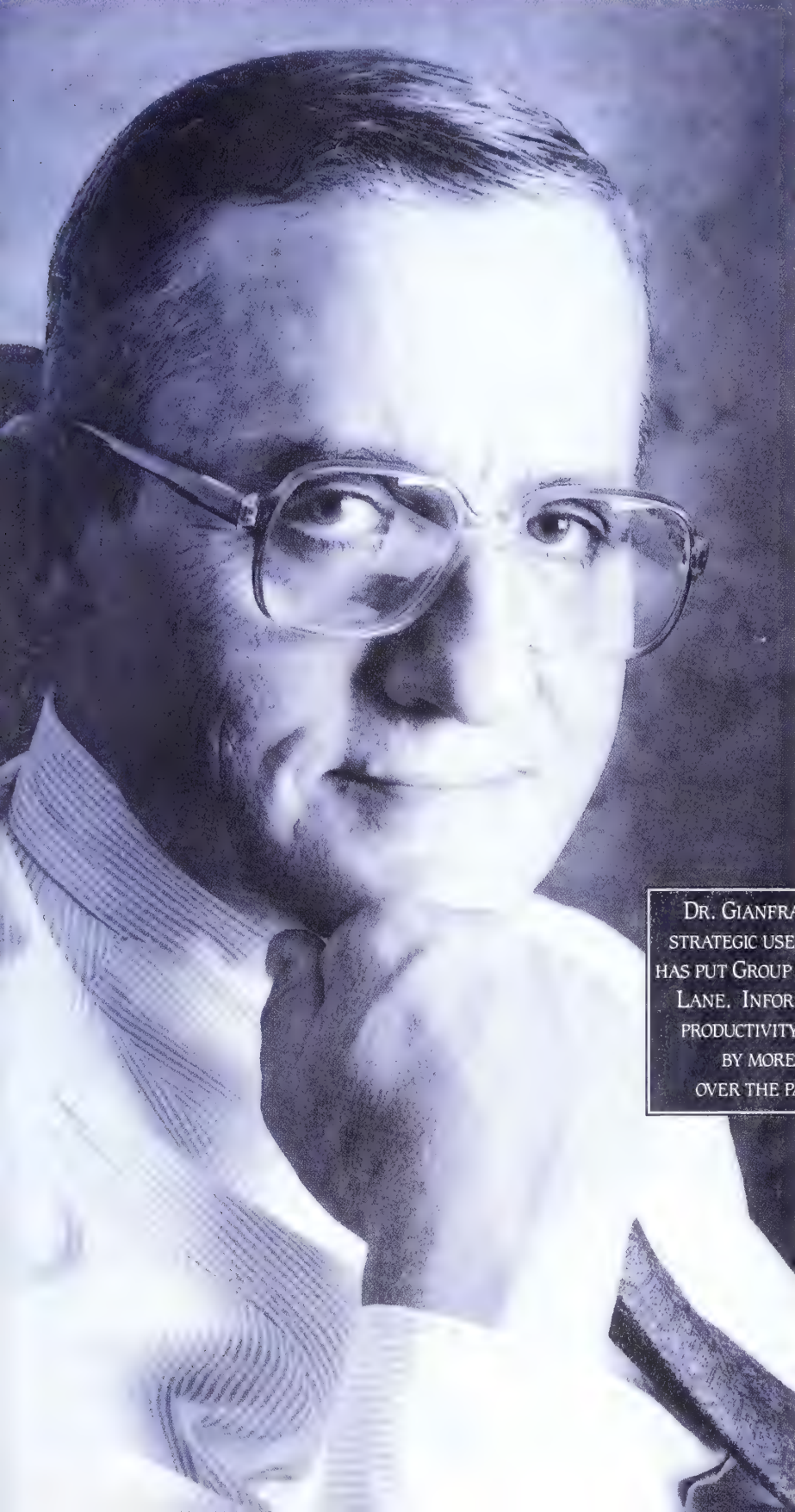
RUNNING UP FIRST EMPIRE STATE

What isn't a biotech, high-tech, or health care stock but is selling at \$119 a share? Give up? It's none other than a bank—a Buffalo bank called First Empire State. In spite of the tough times most banks have had, First Empire's stock, which traded at around 55 in January, 1991, had zipped into the 90s by September, where it hovered for the rest of the year. By December, First Empire was again on the rise, hitting a high of 119 on Feb. 25.

Bulls say the runup may not be over. Investment adviser Andy Addison, editor of *Institutional View*, a market letter in Franklin, Mass., says both fundamental and technical factors continue to bode well for First Empire. He notes that despite its lofty state, the stock is selling at a discount to the market's price-earnings ratio. He figures First Empire could hit 150.

Based on estimated 1992 earnings of \$10.75 a share, the stock is trading at a p-e of just 11. And based on Oppenheimer analyst Cheryl Swaim's 1993 estimate of \$13.50, the stock is trading at a p-e of 8.8. Swaim upped her estimate from \$12 after First Empire's purchase of two of Midlantic's healthy New York banks, which boosted First Empire's assets to \$10.6 billion from \$8.5 billion. Selling below bank-group averages, "the stock is cheap," says Swaim. Management, which owns 18%, is shareholder-oriented, she adds. So is Warren Buffett, whose Berkshire Hathaway has a 7% stake.

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TRACKING ADJUSTMENT: A WIRELESS NETWORK KEEPS INVENTORY AT MAERSK'S CARGO YARD

WIRELESS NETS AREN'T JUST FOR BIG FISH ANYMORE

The telecom giants aim to sell mail and data services to the masses

Frederick W. Smith became a business legend by creating the overnight package-delivery industry with Federal Express Corp. He did it by assembling his own airline and guaranteeing that your package would arrive at its destination the next morning, no matter what. But less known is the critical role that telecommunications technology has played in keeping the \$7.7 billion company the dominant force in its market. Back in 1977, FedEx began building a radio-based communications network that eventually tied all its offices, planes, and couriers to the company's

computers in Memphis. That lets FedEx trace any package from the moment it's picked up at a customer's office to when it's delivered.

Until recently, the only way to get the kind of network that FedEx runs was to build it yourself—at a cost of hundreds of millions of dollars and years of development. But now there's an alternative. Everybody from cellular phone companies such as GTE Mobilnet to IBM, Motorola, and Swedish giant Ericsson is trying to bring wireless networks to the masses. Two new systems—Ardis and Ram—are already up and running.

These networks are relaying electronic mail to traveling executives and exchanging information with field-service technicians, insurance-claims adjusters, and other on-the-move workers. Early customers include ADP, National Car Rental, and ICL Retail Systems. The payoff, as at FedEx, is improved customer satisfaction, higher productivity, and greater operating efficiency.

TIMESAVER. Take Maersk Inc., the Danish shipping company. It sometimes misplaced containers in its huge U.S. shipyards, leading to delays in delivering cargo to customers. Now, Maersk cargo-yard operators in Newark, N.J., and Charleston, S.C., relay container reports to a data base using wireless terminals. That saves about two hours a day of workers' time. "It gives you a competitive edge," says Maersk Telecommunications Director Tivadar Macskassy.

The mobile data business is a major part of an even bigger market for all kinds of wireless data communications, including office computer networks that use airwaves instead of wires. This year, sales of all kinds of wireless data equipment will reach \$450 million, while revenues from wireless data services will hit \$160 million, estimates Ira Brodsky, president of Datacomm Research Co., a market researcher. Within 10 years, equipment sales could more than quintuple, to \$2.5 billion, and services could surge to nearly \$1 billion, he estimates.

Meanwhile, communications companies are modifying existing networks for wireless data. Cellular carriers such as McCaw Cellular Communications Inc. are pursuing a variety of technologies to boost data traffic over their voice systems (box). Specialized mobile radio (SMR) networks that have been used to dispatch fleets of taxis are now being fitted for data communications. Paging services are also getting in on the act. SkyTel Corp. last September began the first national service that delivers text and data to pagers. Motorola Inc., the world's leading maker of pagers, is rolling out a service called EMBARC that will

FOUR WAYS TO MOVE DATA THROUGH THE AIR

WIRELESS DATA NETWORKS

TECHNOLOGY Radio-frequency networks for data only

USE For mobile workers who need to communicate frequently with a corporate data base

EXAMPLE Ardis, Ram-Mobile Data

FLEET DISPATCH SYSTEMS

► Share voice network that dispatches taxis, vans, etc.

► For companies that need mobile data service but don't require national coverage

► Motorola, Racotek, Fleet Call

CELLULAR PHONE NETWORKS

► Data is carried over cellular channels

► For mobile workers who need to send occasional long files

► Any cellular operator

PAGING

► Advanced pagers that handle both numbers and letters

► Primarily for one-way transmission of electronic mail and bulletins to people in the field

► Motorola, SkyTel, BellSouth

nect palmtop, notebook, and laptop computers via paging channels. But Ardis and Ram, designed specifically for data, seem to have the edge over services that piggyback existing wireless networks. Both use the packet-switching technology that telephone-based data networks use. Packet switching encapsulates data in "envelopes," which ensures that information arrives intact. Paging systems, SMRS, and cellular networks don't yet have packet-switching, which makes sending data on them more cumbersome.

Ardis Inc., which is jointly owned by Ardis and Motorola, began offering wireless data services in April, 1990, over a network designed by Motorola in the late-1980s for IBM field technicians. In 1989, Ericsson teamed up with New York-based Ram Broadcasting Inc. to develop a competing system using Ericsson equipment. BellSouth Corp. bought a 9.9% stake in Ram Mobile Data for \$10 million this January.

Despite high costs for the hardware—terminals run as high as \$2,000 and radio modems about \$1,700—the companies are signing dozens of customers. Ardis says its customers spend \$70 to \$100 a month per terminal, while Ardis says its customers average \$90 to \$120. Companies such as National Car Rental System Inc. say it's worth it. National Car says Ram to manage its huge inventory of cars. Workers with handheld terminals prowl vast lots, recording the location of cars and the latest scratches and dents. Now the company can check customers' claims that a car was already damaged and find out quickly when one has been stolen. The big payoff: Moving cars in and out faster should boost utilization by 2% and each percentage point means more than \$1 million in savings, says Chief Information Officer John Livingston.

MYTH. As archrivals, Ardis and Ram devote nearly as much energy to knocking each other as to promoting the concept of wireless networking. Ram says its system will be able to handle more traffic than the Ardis network because it has more radio channels. Ardis President Jack W. Blumenstein fumes: "The myth that we have a capacity problem is just that." He says that with new digital technology, Ardis can meet all its capacity needs through the year 2000. Ram also claims its system is more open to innovation because it is encouraging other companies to build radio modems for use on the network. Ardis, on the other hand, requires customers to buy Motorola modems. That policy is a big reason why Hewlett-Packard Co. isn't working with Ardis, says Clain Anderson, HP's program manager of communications products. HP is interested in selling its LX palmtop computer as a wireless

data terminal. Ardis says it's watching to see if its policy is a deterrent.

At this point, Ardis is by far the leader. Its service is available in 400 metropolitan areas, vs. 30 for Ram. While Ram promises to expand to 100 cities by yearend, Ardis is using its nearly blanket coverage to sign up customers now. While only a few hundred people now use Ram, Ardis provides service to nearly 20,000 workers at such companies as Pitney Bowes, NCR, and ICL. Then there

are 20,000 IBM technicians who continue to use Ardis.

But the race is far from over. New players and new technologies are entering the market all the time. What is clear is that wireless data services are here to stay. The era when companies could give employees a pocketful of change and tell them to call in from the nearest pay phone is gone forever.

By Lois Therrien in Chicago, with Chuck Hawkins in Atlanta

CELLULAR: IT'S STILL A BUMPY HIGHWAY FOR DATA

A few years ago, it took Co-Op Building Consultants 10 days to assess fire or hurricane damage and get the paperwork to an insurer. Now, equipped with cellular phones, consultants at the risk-management firm based in Corpus Christi, Tex., fill out an estimate on a laptop, wing it via cellular to headquarters for approval, and hand over a faxed copy to the insurance adjuster—all in 90 minutes.

IS CELLULAR BETTER YET?

- P** ▶ Cellular phones work like regular phones
- R** ▶ The cellular network is ubiquitous and more versatile
- O** ▶ Cellular is less expensive for sending long files of data
- A** ▶ Current technology using modems is clumsy, expensive, and unreliable
- C** ▶ Nationwide coverage requires dealing with many cellular companies
- O** ▶ Calls take a long time to set up, making them less than ideal for short messages
- N**

Says Co-Op President Clay Page: "We can handle about 60% more work with the same number of people."

Satisfied as Page is, he's part of a tiny minority of cellular customers—about 5%—who use their wireless phones to transmit data. Why so few? Carriers have been too busy building networks, signing voice customers, and paying off debt to promote data services. And because today's cellular networks are designed for voice, they have some disadvantages.

But that's about to change. As wireless data networks such as Ardis and

Ram come on strong, cellular operators want a piece of a market that may be theirs to lose. No. 1 carrier McCaw Cellular Communications Inc. says it will unveil plans for data services next month. Says PacTel Cellular President Susan Swenson: "We've got a highway out there, and we'd like to put more cars on it."

CALLING THE COPS. Cellular players are betting on heavy traffic. By 2000, nearly 13 million users of mobile data terminals will spend about \$50 a month each on cellular network calls, predicts Michael McLaughlin, a consultant with Booz Allen & Hamilton Inc. Moreover, adding data traffic could bolster cellular profits, since carriers wouldn't have to install much new gear.

Portable computers and data terminals wouldn't be the only market, either. Vending machines could use cellular to automatically send data to computers at headquarters, and alarm systems could call the police.

But cellular carriers have a lot to do first. Today, noisy cellular lines often scramble data. Data also can be lost when a caller moves from one cellular relay station to another. And cellular costs more on brief calls: That can triple the cost of a typical 10-second data message.

Still, cellular has advantages: It already covers hundreds of cities. And new technologies soon may fix many of its problems. Some carriers are planning this year to add packet networks similar to those of Ardis and Ram. That would eliminate the hassle of programming modems and allow the same instant connections, cutting transmission costs.

The biggest boost may come this year as carriers begin to replace their analog networks with equipment using the same digital language as computers. That will improve reliability and speed transmissions. It also will triple capacity, leaving more room for data.

But for now, it's uncertain how many customers will wait for the improvements. Unless cellular carriers ease the path for data, they may find customers taking another highway.

By Robert D. Hof in San Francisco



RUSSIA CAN'T JUNK ITS NUCLEAR WARHEADS FAST ENOUGH—SO THE U.S. IS READY TO HELP

IF YOU CAN'T BUILD WEAPONS, DESTROY 'EM

Billions of dollars in contracts are up for grabs

These are hellish times for once-coddled arms makers, as budget cuts force layoffs and downsizing industrywide. But amid the carnage, a few companies are positioning themselves at ground zero of a booming business—dismantling nuclear and other weapons amassed during the cold war.

It looks to be a megaton market. At least 20,000 nuclear weapons will be destroyed or shelved. As part of that process, storage will have to be arranged for truckloads of deadly plutonium and weapons-grade enriched uranium, with half-lives of up to 500 million years. There also are bulging stockpiles of chemical and conventional munitions to disarm. And atop all that, there's the

staggering cost of cleaning up the environmental mess left behind by weapons production. That's estimated at \$100 billion in the U.S. alone.

Last May, Mason & Hanger-Silas Mason Co., a big engineering outfit based in Lexington, Ky., won a \$1.6 billion contract to oversee disassembly of U.S. nukes and storage of their components. But there's still competition for that job. Lockheed, Olin, and Babcock & Wilcox—all of which bid on the original contract—have challenged the deal in court, citing Mason's spotty safety record (page 88). Moreover, the three have launched a joint venture, International Disarmament Corp., to go after foreign business.

Their immediate target is the \$400 million set aside by Congress last year to help the Russians destroy chunks of their nuclear arsenal. Right now, Russia is able to retire only about 1,500 warheads a year of the 10,000 to 20,000 that may have to go. It's a delicate process that involves removing a highly explosive chemical blanket from around the plutonium core, incinerating it, and preparing the plutonium for storage. "We don't think they can handle this by themselves," says Troy E. Wade III, IDC's chairman and a former head of the Energy Dept.'s nuclear-weapons program. The money hasn't been allocated yet. But U.S. companies hope it will lead to work for them in helping add to Russia's network of decommissioning plants.

FRIED WEAPONS. The Russians also need help eliminating their massive stockpiles of chemical weapons. Russian President Boris Yeltsin and President Bush recently agreed to dramatic chemical-arms reductions. But Raytheon Co. Senior Vice-President George W. Sarney says that the one plant in the Commonwealth that could destroy such weapons—in the Russian city of Chapayevsk—has been shut down because it couldn't dismantle weapons safely enough. With other methods not readily available, some Russian experts have proposed annihilating chemical weapons through controlled underground nuclear explosions. "Unfortunately," says Yuri E. Pinchukov, an arms-control expert at Moscow's Institute of World Economics & International Relations, "we have people here who think that's a good idea."

U.S. companies think they have a better way. Late last year, Raytheon won a \$429 million, five-year contract to manage the U.S. Army's chemical-weapons dismantling plant on Johnston Atoll, 700 miles southwest of Hawaii. That's part of a \$6.4 billion Army project to destroy tons of chemical munitions over the next decade. The highly automated facility uses conveyor belts, robotics, electronic sensors, and special incinerators to extract nerve agents and explosive components, then fry them at ultrahigh temperatures. What's left is recyclable scrap

CLEANING UP AFTER THE COLD WAR

NUCLEAR WEAPONS

The Energy Dept. will spend nearly \$3.2 billion over 10 years dismantling warheads. Congress has set aside \$400 million to help the former Soviet Union retire nukes

CHEMICAL WEAPONS

The U.S. Army will plunk down \$6.4 billion to deep-six its chemical-weapons stockpiles. The Commonwealth's bill will probably be equally high

CONVENTIONAL WEAPONS

Worldwide, the market for demilitarization of conventional arms could hit \$5 billion, half of it to destroy weapons in the old East Germany

ENVIRONMENTAL CLEANUP

The U.S. government expects to dish out \$100 billion through the year 2019 to clean up radioactive, industrial, and other cold war environmental waste

DATA: ENERGY DEPT., U.S. ARMY, BW



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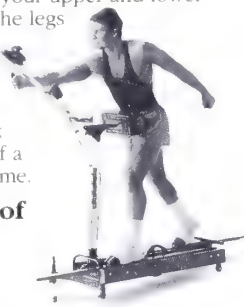
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Industries

metal and fiberglass. The Army plans to build eight other facilities on the U.S. mainland—one of which has landed Morrison Knudsen Corp. a \$900 million construction contract. And Raytheon recently won Commerce Dept. approval to export its expertise and technology for such work.

Destroying conventional weapons may not require such an elaborate setup, but it will nonetheless generate an estimated \$5 billion in contracts worldwide. In Germany alone, reckons Defense Minister Gerhard Stoltenberg, it will cost some \$2.5 billion to break up and recycle old ammunition, mortars, tanks, and other East German army leftovers. All told, says Toby G. Warson, chief executive of Honeywell Inc. spinoff Alliant Technology systems Inc., there's enough weaponry "to fill the World Trade Center in New York about 35 times over." German arms companies Diehl and Kaus & Steinhäusen grabbed about 50% of the ammunition disposal work handed out last year. But Alliant says it is close to clinching a \$300 million deal to destroy Russian antitank weapons in Germany.

SPOILS OF PEACE: A TEXAS TUSSLE

It's quite a spread, 16,000 acres on the plains of the Texas Panhandle. There's good reason for all that space. For the next eight years or so, the Energy Dept. will use its Pantex nuclear-assembly facility just outside Amarillo (population 151,615), to put thousands of warheads in ice. Pantex also is the focus of a legal battle over who will control that lucrative work.

Last May, Energy awarded a \$1.6 billion five-year management contract to a little-known engineering outfit called Mason Hanger-Silas Mason Co. Since the 1950s, the Lexington (Ky.) concern has expertly managed the task of making nuclear weapons at Pantex, the nation's only nuclear assembly plant. With the outbreak of peace, Pantex is switching to disarming nuclear weapons. 'UNEVEN RECORD.' Mason won that contract because the government decided that it was getting bidders—Lockheed, Olin, and Babcock & Wilcox unit of engineering giant McDermott International—lacked experience in running such facilities. Now, others have sued the Energy Dept. in U.S. District Court in Dallas, charging that the agency has ignored Mason's past problems in running the facility. While the case awaits a trial date, a House Energy & Commerce subcommittee headed by Representative Michael L. Synar (D-Okla.) is investigating. Says Synar: "I'm troubled by the

Ultimately, getting rid of weapons won't be nearly as big a task as cleaning up the pollution generated in producing them. Under the U.S. Energy Dept.'s \$100 billion plan, all of its nuclear-protection facilities will be sanitized by the year 2019. That means disposing of some four decades' worth of industrial solvents, heavy metals, and radioactive wastes that have accumulated at government-owned production facilities, such as the Rocky Flats plant near Denver. Waste Management Inc. set up a subsidiary last year to pursue a \$5 billion contract to overhaul a uranium-processing plant in Fernald, Ohio. The feds will award the job, the largest remediation project ever, later this year. Russia, meanwhile, is just beginning to contemplate its own eye-popping environmental cleanup tab.

Of course, the revenue potential of the post-cold-war cleanup is a fraction of the billions of dollars it cost to make all those weapons in the first place. Still, it will be a good business for those who can master it. After all, peace isn't free. *By Brian Bremner in Washington, with James E. Ellis in Chicago, Deborah Stead in Moscow, and Ron Lewald in Bonn*

Mason has had such an uneven track

the General Accounting Office. In April, 1991, report on Mason's management the watchdog agency concluded that he had "one of the highest injury and workday rates" in recent years in Energy nuclear-weapons network. It also said he was sometimes unprepared to handle radiation accidents. One example: In 1989, a device to contain tritium gas during a routine weapons dismantling. No workers were killed, but some were exposed to radioactive gas. The government spent some \$2 million to decontaminate the facility. On other occasions, dating back to 1984, workers were needlessly exposed to radioactive dust, the GAO says.

LOYALTY MENTALITY. Mason won't discuss the lawsuit or the GAO report, referring instead to the Energy Dept. Everett H. Everet, principal deputy assistant secretary for defense programs, concedes there have been problems at Pantex. But he adds that Mason "has done quite well in bringing procedures into line" with Energy's tightened standards. Beckner says that Enbridge plans to fight the suit and has no intention of giving Mason the heave-ho. Attorneys representing the competing sides argue in court documents that is typical of an "old boy network" mentality that values loyalty over performance. But the dispute also may underlie one thing more: just how much money is at stake as the business of denuclearizing the world picks up speed.

By Brian Bremner in Washington

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KEEPING PLANES OUT OF EACH OTHER'S WAY

The current collision-avoidance system isn't perfect, but it helps

It was a crash heard 'round the country. In September, 1986, a single-engine plane plowed into an AeroMexico jet over Cerritos, Calif. Nearly 100 people perished in the air and on the ground. The Federal Aviation Administration concluded that the jet's crew never saw the small plane, whose pilot had veered out of his approved air space shortly before the collision.

Spurred mainly by this tragedy, Congress told airlines that by 1994 they had to install traffic-alert and collision-avoidance systems (TCAS) in the 4,300 commercial planes operating in the U.S. It has taken six years to hone the technology, and not all the bugs are out yet. "We're 80% of the way there," says Ross Beins, a United Air Lines Inc. manager who chairs an airline industry task force that is evaluating TCAS. But the system, which costs \$200,000 installed, has already been put in half of all commercial planes—those that carry at least 30 passengers. And so far, the evidence shows that it may provide a crucial margin of safety as U.S. air traffic grows an estimated 56% by the year 2000.

Interest in a collision-avoidance system really dates back to 1956, when two jetliners crashed into each other over the Grand Canyon, killing 128 passengers. But it wasn't until the mid-1980s that advances in computer chips and software made it possible for the system's three manufacturers—Allied-Signal

Inc.'s Bendix/King Div., Honeywell, and Rockwell International's Collins Commercial Avionics subsidiary—to produce sophisticated enough gear in a light enough unit.

What they've come up with, in a 48-pound package the size of a 19-inch TV, is a combination computer/receiver that can pick up the individualized radio signals emitted by the transponders that most planes carry. By locking in on the transponder signal of another aircraft, a TCAS computer can tell the other plane's altitude, speed, range, and bearing. Using software developed by Mitre Corp. in Bedford, Mass., and Massachusetts Institute of Technology's Lincoln Laboratory, the computer compares the planes' projected courses. If they come within three nautical miles and 1,000 vertical feet of each other, TCAS issues warnings that get more urgent as the time until potential impact decreases. It even tells a pilot to climb or dive.

CLOSE CALL. During 2,500 hours of tests in the past 18 months, pilots credit TCAS with helping avert 10 to 15 midair collisions, says Thomas Williamson, a TCAS expert for the FAA. In one case last October, a jet from now-defunct Midway Airlines Inc. had just taken off from Chicago's Midway Airport when TCAS warned that a Southwest Airlines Co. plane was in its path. The crew took evasive action—and even so, the planes missed by only about 1,000 feet at the same altitude. Now, says United's Beins: "You'd have a mass revolt if you tried to pull TCAS off" the planes that have it.

Not that TCAS doesn't have glitches. Its chief critics, air-traffic controllers, want to limit the system's ability to order planes out of an assigned air space without a controller's approval. Each controller tracks 15 to 20 aircraft at a time. And "we rely on knowing where each plane is because we're basing our next instruction on that," says Chicago controller Ray Gibbons, the TCAS expert at the National Air Traffic Controllers Assn. The system's backers, including the FAA, respond that it operates only in an emergency—and that when a collision is imminent, there's no time to radio the tower for instructions.

Still, there's no question that the system is sensitive. In tests on two of its planes, United reports that traffic alarms sounded every 2.2 flight hours, and an alert to dive or climb was issued every 28.1 hours.

Complains John E. O'Brien, director of the Air Line Pilots Assn.'s air-safety department: "There are too many nuisance warnings, especially in dense areas."

Some of these shortcomings have been dealt with. For instance, Collins has fixed a software error that caused its system to pick up phantom planes. And all three manufacturers are revising their software to cure another headache: As planes prepare to land, the systems sometimes pick up aircraft on the ground and sound a verbal alert: "Traffic! Traffic!" The new software halts this close to the

THE SYSTEM THAT MAKES FLYING SAFER

A small plane that's flying at a safe distance shows up as a white diamond on a screen that the pilot monitors in the cockpit of a jetliner

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Once the other airplane is within 25 seconds of impact, the yellow circle changes to a red square, and the synthesized voice issues an order: 'Climb!' or 'Dive!'

After the danger has passed, the small plane again shows up as a yellow circle, and the system notifies the pilot: 'Clear of conflict'

DATA: ALLIED-SIGNAL; HONEYWELL; ROCKWELL

IS AMERICA'S WORK FORCE BANKRUPT?

Many business leaders believe the answer to that question is a frightening "Yes." They perceive an absence of commitment, a lack of maturity, and the inability to absorb training to be an alarming trend in much of today's youth.

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These smart new soldiers then become students in the nation's largest technical training organization. With 18 major technical training complexes, the Army trains young adults in over 300 specialties, many that involve high-tech equipment and state-of-the-art technology. It is a system that graduates over 100,000 men and women each year.

Transferrable skills.

Researchers at Ohio State University found that 50 percent of the people recently separated from the Army had transferred the occupational skills acquired in the military to their civilian employment. This was slightly better than the rate of skill transfer by graduates of business schools and vocational/technical colleges. But beyond occupational skills, soldiers acquire other lifelong qualities.

As a matter of fact, a survey of hundreds of employers, many from Fortune 500 companies, clearly shows that they value the attributes soldiers develop in the Army and will hire young people who are reliable, disciplined and have responsible attitudes toward work.

How the Army Career and Alumni Program helps America.

This year about 150,000 men and women will leave the Army. As they return to civilian life, they bring with them self-discipline, motivation, and technical skills America's work force needs. To help them get a head start on their civilian careers, the Army established the Army Career and Alumni Program (ACAP).

At ACAP Centers around the world, the Army provides training in job search skills for soldiers and their families. Besides facilitating their entry into the civilian world, the ACAP program prepares soldiers to make immediate contributions in their new civilian jobs.

How ACAP can help your business.

While ACAP serves the needs of the soldier, it's also a resource for employers across America. Interested employers may enter their firms into the Army Employer Network Data Base and find out more about ACAP by calling 1-800-445-2049.

It makes sense to support Army recruiting and Army Alumni. The Army will continue to recruit and train high-quality young men and women because they are the key to maintaining America's defense. And the Army will continue to return to the civilian sector capable, mature, highly-motivated young people, ready to Be All They Can Be as part of America's work force.



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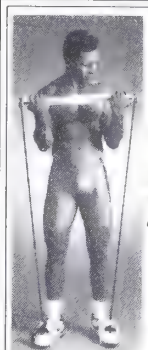
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ground. Faulty transponders also can cause a plane to track itself and trip an alert. But as aging transponders are replaced, this should stop as well.

There is one potentially dangerous problem that seems particularly hard to solve. At some busy airports, including Dallas/Fort Worth and Detroit, airliners must take off or descend at very high speeds in close proximity to each other. TCAS often anticipates a crash and orders evasive action, even though these planes will soon be leveling off safely in their assigned airspace.

COMPROMISE. Some experts say that most of these alerts could be prevented by changing the software so that an alarm sounds when planes are within, say, 700 feet of each other's altitude instead of the current 1,000 feet. A jetliner can climb 700 feet in 30 seconds or less. So the idea of such a change makes United's Beins and others nervous. They would rather alter basic traffic patterns. But that would require an overhaul of the air-traffic control system, which is unlikely. As a compromise, the system's manufacturers are trying to develop software that will be able to

One major problem:
No other country requires
its airlines to install TCAS
or anything like it

infer when a plane is about to level off.

Even if that fix works, TCAS won't be omnipotent. No other country has required its airlines to install TCAS or anything like it. And American Airlines Inc. crews have noted 27 incidents where other aircraft, mostly foreign-operated, have put their transponders on settings that TCAS can't pick up. Over Newfoundland last fall, for instance, one American jet was climbing in response to a TCAS order and nearly overtook a third, foreign plane the system had failed to spot. The FAA can't force foreign airlines to alter their procedures outside the U.S., but it has advised them of the problem.

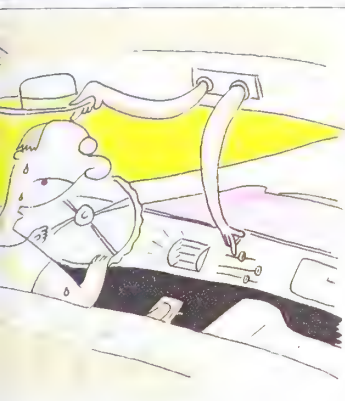
In the meantime, industry experts are eyeing the next-generation TCAS. It will direct pilots to move sideways, as well as up and down, to avoid collisions. That's better, because when banking left or right, "you get the best response from the plane, and there's less impact on passengers," says O'Brien of the pilots' union. That system may be ready by the end of the decade—and further ensure that it will take more than human error to cause two planes to collide.

By Lois Therrien in Chicago, with Seth Payne in Washington

Developments to Watch

EDITED BY SUNITA WADEKAR BHARGAVA

HIS CLIMATE CONTROL TAKES ITS CUE FROM YOUR SKIN



Car air conditioners are supposed to cool the passengers, not just the air around them. But current systems can't distinguish between a driver who has been sitting inside with the AC on for 20 minutes and one who just entered a cool car from the outside. That's because even in today's advanced systems, sensors measure only inside air tem-

perature, solar radiation, and external air temperature.

Engineers from Japanese companies Nippondenso Co. and Toyota Motor Corp. have developed more sophisticated controls that measure the driver's skin temperature. An infrared sensor mounted on the roof above the windshield relays skin temperature readings to a computer that compares the figure to a target temperature set by the driver. It then adjusts the air conditioner automatically. However, don't look for it on next year's Lexus. Tests so far have all been laboratory-based. Toyota researcher Yousuke Taniguchi doesn't expect to see the system in a production car until the next century.

MAKING MYSTERY MATERIALS GIVE UP THEIR SECRETS FASTER

An electron microscope is a powerful tool for analyzing the composition of everything from metal alloys to complex chemicals. Performing actual experiments, however, can be tedious. To measure the precise amounts of a substance, the microscope first has to be carefully calibrated through a long process of trial and error.

Now, researchers at the National Institute of Standards & Technology in Gaithersburg, Md., have produced a new computer program and data base that provides a short cut to avoid trial and error. "The program allows you to model the entire experiment at your desktop," explains NIST physical scientist Charles Fiori, one of the developers. "You put a hypothetical specimen under the microscope and find out if you can detect a hypothetical element."

The Desktop Spectrum Analyzer & X-Ray Database (D TSA) program also analyzes data from actual experiments. And D TSA breaks new ground in another way: In an effort to get more financial return from taxpayer-funded research, NIST is selling the software for \$790.

II, THIS IS FAST-FINGERS LOUIE. JUST CHECKING IN...

In recent years, corrections agencies have begun to use electronic wrist monitors and anklet transmitters, along with voice verification, to monitor low-risk prisoners who serve time at home. Now, Synetics Corp. in Wakefield, Mass., has developed a system, called Lipsinc, to track parolees using caller ID and automatic speech-recognition technology.

Lipsinc checks an incoming call's point of origin, then veri-

fies the caller's identity by comparing his or her voice with a voice imprint taken before the prisoner was released from custody. An early prototype of Lipsinc, its designers claim, has a 99% accuracy rate after the caller has been on the line a minute or so. Synetics, a systems engineering company, designed Lipsinc for U. S. Telefactories Corp., which runs a high-tech messaging service in Aurora, Ill.

The companies say the technology has also attracted interest from securities firms and banks interested in verifying telephonic financial transactions. On the other hand, competitors say making the caller repeat the same phrase may work for a captive audience, but that doesn't mean the system is ready for Wall Street.

A DRAM COME TRUE: CHIPS THAT DON'T FORGET

Today's computers bear out the adage that memory is fleeting. The information held in dynamic random-access memory chips (DRAMs) vanishes when computers are shut off. So data has to be stored on hard disks or other devices.

Scientists at Cree Research Inc. in Durham, N. C., and Purdue University are beginning to design chips—made from silicon carbide instead of the traditional silicon—that won't lose their memories when the power goes down. Electric current leaks out of silicon carbide 10,000 times more slowly than from silicon. Such a chip would hang on to data for years, instead of milliseconds. That would greatly boost battery life in laptops and could eliminate the need for disk drives. "It is the ideal memory," says Cree scientist John W. Palmour.

Cree, which was spun off in 1987 from North Carolina State University, has now successfully built a key component of such chips—individual storage cells. Says Dwight Duston, director of innovative science and technology for the Pentagon's Strategic Defense Initiative Organization: "It's the biggest breakthrough of the year."

HIT THE STACKS— WITHOUT LEAVING THE DORM

Carnegie Mellon University students may no longer have to trudge to the library to scan the latest in scientific research. Thanks to Project Mercury, one of the first electronic library systems using distributed computing, they can tap into the library electronically with nearly any type of personal computer from anywhere on the campus.



The on-line system currently carries seven journals on computer science and artificial intelligence. Within seconds of asking to see an article, the student's PC displays fine-quality images of the journal pages, including diagrams and graphics. Although CMU doesn't plan to have books on-line, it is negotiating with various publishers to carry other scientific journals.

Project Mercury allows for a more decentralized library system consisting of 14 data bases on smaller workstations around the campus. That means each department can set up a data base and publish its own papers or journal without having to go through a central library clearinghouse.

January 1989: We decided the only way to reinvent our cars was to reinvent our company.

And that's what we did. Three years ago, we turned the company upside down. Inside out. We changed the company to change the way we make cars.

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It's a fundamental change in our way of working. In our corporate culture.

The Company has been organized into four platform teams—large car, small car, truck, and minivan. Each team is product engineers and manufacturing engineers, planners and buyers, marketers, designers and finance analysts in lockstep, talking together and working together.

Sharing responsibility.

It's not the old way: an engineer finishing his piece of the car and tossing the plan over the fence to the next guy up the line.

It's the new way: everybody working together to resolve all the technical problems beforehand. To make sure the designer's concept can be engineered and the engineer's plan can be built so that problems are solved up front and costly trade-offs downstream are eliminated.

Everybody focused on one goal: making a great car.

And what drives the system is the voice of the customer. The customer who is most likely to buy the particular product.

The result is better quality, lower cost and a reduction in the time it takes to get a product to market.

The result is a whole new way of making cars.

It's a new home for a new way of making cars: The Chrysler Technology Center.

It's the new guts, the new heart, the new muscle of our company.

The Center in Auburn Hills, Michigan opened officially October 15, 1991. And our platform teams have started moving in.

Not only will they be conveniently located to each other, but to all the tools they will need to do their jobs.

Electromagnetic and environmental labs, a wind tun-

nel and a test track. A pilot factory to test computerized manufacturing equipment, shops to hand-build prototype vehicles, and design studios. Even an education center. All the tools needed to make cars that are safer, environmentally responsible and more efficient. In all, 7,000 people will go to work at the Center.

Some people ask, "Why put a billion dollars in new real estate now?" The answer is simple. The Chrysler Technology Center is a long-term investment in a whole new way of working. And it will be worth every penny of it.

To us. And to you, our customer.

It's a company with a new record of getting from show car to showroom.

The original V-10 Dodge Viper made its debut in January 1989 at the North American International Auto Show in Detroit. The reaction from the public was instant and overwhelming.

And so was Chrysler's response. A study task force grew quickly into Team Viper—charged with bringing the car to market within three years. A world-class record for this country.

And so was born more than a new sports car: a more responsive product development process that dramatically cuts lead time and investment.

And so was born the prototype for organizing a whole company.

We predict our new cars will drive a new trend: cab forward.

In the fall of 1992 Chrysler will launch a new series of midsize cars. Cab forward cars: a concept that is based on restructuring the car, not restyling the car.

The base of the windshield is pushed forward over the front wheels. The rear wheels are pushed rearward. The width of the car increased.

From these simple changes are derived a whole series of important benefits.

The first is more room up front and rear for the driver and passenger. Another is the ability to engineer a signifi-

cantly longer wheel base in a midsize car. Ride and handling are thereby improved.

The longer wheel base in turn allows for larger doors front and rear for easier entry and exit. Without sacrificing trunk space.

Exceptional aerodynamics, reduced wind noise and improved fuel economy are also derived from the cab forward restructuring.

But true uniqueness is derived from the quality of the total car: the quality of the driving experience.

Cab forward will become a new trend. Just because it makes so much sense.

It's a company with achievements to build on.

It's a company with dominance in important aspects of the business.

The most significant is the Chrysler minivan. We gambled on a new idea only we believed in. And America loved it. And three million minivans later we're still improving them. Making them safer, more functional and friendlier for the American family.

Everybody knows we bought Jeep*, the gold standard for four-wheel drive, not just in this country but around the world. Our new Jeep* Grand Cherokee will create new standards for all sport utility vehicles.

We reintroduced an old idea, the convertible, to a new generation. We turned fun into a big business. And everybody jumped on the bandwagon.

The American public thinks of us as warranty leaders with good reason. We believe we started a trend in warranty improvement across the board to the benefit of all consumers.

All our plants are new or refurbished. But no automotive plant in America will be more socially responsible or technically proven than our newest, Jefferson North, in the heart of Detroit.

Building something new is good. Having something to build it on is better.

Our dedication to safety started an industry trend.

Most people know that Chrysler is the only car company that puts driver-side air bags on every passenger car it builds in the U.S.*

They may not know we are the first with a minivan driver-side air bag†. That the minivan has an available built-in child restraint seat and rear-seat shoulder harnesses. Even anti-lock brakes and all-wheel drive are available.

As a matter of fact, anti-lock brakes are available on 80% of the vehicles we build. More models than Toyota, Honda and Nissan combined.

And everybody should know we have invited the

industry to join us in making safety a top priority.

For the benefit of all consumers.

And by the way, while we were busy changing the company, we took three billion dollars out of costs.

As someone said, we wrote the book on survival in the 80's. In a recession you get lean. Fast. We've also demonstrated when the cycle turns up, you make money. Lots of it.

The Company has literally been transformed for a different marketplace. The 90's: a tougher, faster, more competitive time and place.

How did we get out the three billion dollars?

By taking a long, hard look at every procedure in our company, and mapping out every step in those procedures. It has to add value, improve quality, and serve the customer better — or we get rid of it. We found we could eliminate at least 50% of the steps. In some cases, 90%.

That's called lean production. It's the best way to get everybody focused on one of the goals: cutting costs.

We asked for suggestions and we got them. Streamlining spare parts handling alone saved 100 million. We cut 100 million from our medical expenses.

We instituted a new way to deal with our suppliers as equal partners in the design process. The result: improved quality, lower costs. The result: 135 million in savings.

The trick is to cut the fat without cutting the bone. And we've done it all without jeopardizing our 16.6-billion-dollar five-year new product plan.

No company has more experience at operating with our backs to the wall. But we do what we have to do to compete. That has been our history.

And that will be the key to our future.

It is a more competitive company for a more competitive time.

Chrysler Corporation in the course of the next five years will provide competitive new cars, trucks and minivans. A new Dodge Viper, followed by a new Jeep* Grand Cherokee. And in the fall, the new cab forward sedans from Dodge, Eagle and Chrysler.

In this business you lead, follow or get out of the way. We intend to lead by providing the ultimate advantage: getting better quality products at lower cost to the marketplace faster.

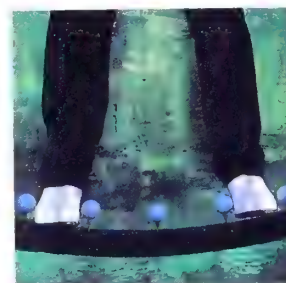
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For the benefit of a more competitive America.

For the ultimate benefit of a more satisfied customer.



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RIGHT: Her jacket, \$118; culotte, \$54; shirt, \$48: Izod Lacoste. Her shoes, \$65: Nike. His pants, \$140; shirt, \$110; cardigan, \$250: Bobby Jones. His shoes, \$135; golf gloves, \$18.75: Foot-Joy. **TOP:** Shirt, \$60: Charter Golf/Ashworth. **MIDDLE:** Silk top, \$60; pants, \$60; deer-suede belt, \$36: Charter Golf/Ashworth. **BOTTOM:** Pants, \$60: Charter Golf/Ashworth. Shoes, \$80: Nike.





OFF HOURS

As the days grow longer and the mercury rises, an executive's fancy turns to leisure. And when the work clothes come off, you'll find all sorts of versatile new casual wear to put on. Whether you're a weekend duffer, a serious hiker, or a water bug, there's plenty of good-looking, well-made sports apparel. Much of it embraces high-tech design and the latest in synthetic fibers, all to help keep you comfortable in the summer elements. Bright colors and textured fabrics spice up classic blazers and dresses for the games you play at night.

ON THE COURSE

Gone are the days of loud plaids and plus fours. Golf clothing now is chic, almost indistinguishable from classy casual wear. Yet it's more functional than ever. Sturdy knits enhance durability. Treated all-cotton jackets repel water. And, borrowing from sneaker technology, shoes are lighter, with air-cushioned heels for support.

PHOTOGRAPHS BY
CHRIS CALLIS

EDITED BY AMY DUNKIN
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ON THE TRAIL

▲▲▲▲▲▲▲▲▲▲▲▲▲▲▲▲

The adoption of lightweight microfiber materials has been a boon to rugged outdoor clothes. These superfine polyesters breathe and feel like natural fibers but offer wind and water resistance.

RIGHT: Her jacket, \$185; Mont-hell. Shorts, \$27.50; Eastern Mountain Sports. Shoes, \$115: Nike. His jacket, \$130: Nike. Jeans, \$58: Calvin Klein. Shoes, \$155: Merrill. **TOP RIGHT:** Jacket, \$98; sweater, \$54; cap, \$10: Banana Republic. **MIDDLE:** Pack, \$30: N/A; Zonerider. Gloves, \$49.95: Patagonia. **LEFT:** Shoe, \$140: Timberland.



**OFF
HOURS**



ON THE WATER

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Stretch tanks and cotton trunks are still the favorites. This year's versions sport neon colors and jazzy South Seas prints. But the real innovation is in footwear, which has evolved from rubber thongs to a variety of stretchy water slippers that hug and protect the feet.



ABOVE: Tank suit, \$54; jacket, \$54: Speedo. Shirts, \$120 each; trunks, \$105: Ermenegildo Zegna. **LEFT:** Aqua socks, \$29.95: Nike.



ON THE TOWN

Summer dress-up clothes should be relaxed and not unduly clingy. With its tuxedo front and full skirt, the cotton piqué halter dress shown here takes styling cues from the 1950s. The three-button linen sport coat has a loose, easy fit but is half-lined to maintain shape.

OFF HOURS

Jacket, \$550; pants, \$200; shirt, \$120; tie, \$60: Hugo Boss. Dress, \$360: Tom and Linda Platt. Jewelry: Eric Beaman Showroom Seven.



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DATA ANALYSIS

His silk robe, \$1,250;
cotton pajamas, \$250;
her silk pajama top, \$650;
Sulka. His slippers, \$105;
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\$48; Natori.

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BusinessWeek

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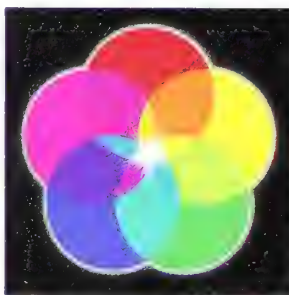
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"The 21st Century American Health System: A Proposal for Change"

Paul M. Ellwood, MD, Chairman, InterStudy

Alain C. Enthoven, PhD, Professor of Public and Private Management, Graduate School of Business, Stanford University

Thomas O. Pyle, MBA, former CEO, Harvard Community Health Plan

"Health Care Policy and Politics: Lessons from Canada, Germany, The Netherlands, and Great Britain"

Robert B. Helms, PhD, Director of Health Policy Studies, American Enterprise Inst.

Edward Neuschler, Deputy Director of Policy Development and Research, Health Insurance Association of America

Sean Sullivan, Executive Vice President, New Directions for Policy

Warren Greenberg, PhD, Professor of Health Economics, George Washington U

Leonard G. Schiffrin, PhD, Chancellor Professor of Economics, College of William & Mary; Clinical Professor of Preventive Medicine, Medical College of Virginia

"The Challenge of Making Health Care Programs Work: An Employer Issue Around the World"

Steven R. Hill, MBA, Senior Vice President, Human Resources and Employee Relations, Weyerhaeuser Co.

Carl J. Schramm, PhD, President, Health Insurance Association of America

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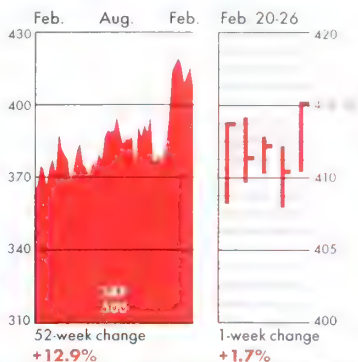
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Investment Figures of the Week

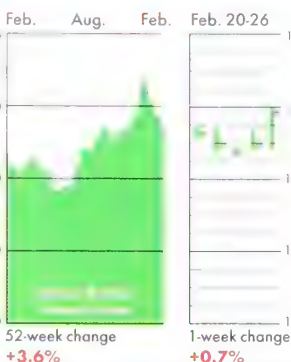
MARKET COMMENTARY

Dow industrial average continued its way upward all week, ending at a record high of 3283 on Feb. 26. The broader S&P 500 had a snappy 1.7% gain but fell 16 points shy of a new high. Small-cap stocks continued to make gains, too. The equity markets took cues from the improving bond market as the yield on the benchmark 30-year bond fell to 7.85%. Japanese stocks rebounded, up 1.5%. Still, that doesn't mean the year bear market is over. Most stocks have bounced back, but only to slip again.

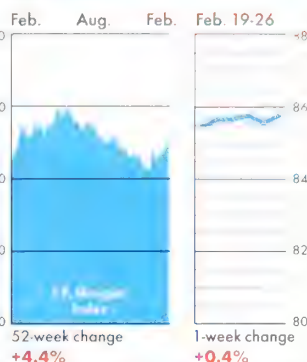
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS	Latest	% change Week	% change 52-week
DOW JONES INDUSTRIALS	3283.3	1.6	13.6
S&P 500 COMPANIES (Russell 1000)	220.7	1.6	15.3
S&P 500 ALL COMPANIES (Russell 2000)	210.2	0.9	32.7
S&P 500 SMALL COMPANIES (Russell 3000)	236.0	1.5	16.2

HIGH STOCKS	Latest	% change (local currency) Week	% change 52-week
DOW JONES (FINANCIAL TIMES 100)	2565.0	1.1	9.2
NIKKEI INDEX	21,364.8	4.9	-17.1
TSE COMPOSITE	3580.5	1.0	3.9

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	4.05%	3.95%	6.2%
30-YEAR TREASURY BOND YIELD	7.85%	7.92%	8.1%
S&P 500 DIVIDEND YIELD	2.97%	2.99%	3.3%
S&P 500 PRICE/EARNINGS RATIO	25.7	24.7	16.9

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	396.0	395.3	Positive
Stocks above 26-week moving average	68.8%	69.6%	Neutral
Speculative sentiment: Put/call ratio	0.36	0.34	Neutral
Insider sentiment: Vickers sell/buy ratio	1.94	1.79	Positive

INDUSTRY GROUPS

4-WEEK LEADERS

	% change 4-week	% change 52-week
INSTRUMENTATION	18.7	48.3
TRANSPORTATION SERVICES	17.1	30.9
MINING	16.9	47.8
ENTERTAINMENT	14.7	20.5
HEAVY-DUTY TRUCKS	12.7	34.0

4-WEEK LAGGARDS

	% change 4-week	% change 52-week
COAL	-11.3	-11.4
HOSPITAL MANAGEMENT	-10.0	-28.6
BROKERAGE FIRMS	-9.6	75.0
NATURAL GAS DISTRIBUTION	-7.3	-25.9
HEALTH CARE SERVICES	-7.1	59.1

Strongest stock in group

	% change 4-week	% change 52-week	Price
HEWLETT-PACKARD	20.7	54.1	73
FEDERAL EXPRESS	21.4	30.8	53 1/8
MIRAGE RESORTS	23.6	30.5	32 1/8
WALT DISNEY	15.6	26.0	153 1/8
NAVISTAR INTERNATIONAL	28.0	18.5	4

Weakest stock in group

	% change 4-week	% change 52-week	Price
WESTMORELAND COAL	-16.2	-20.5	15 1/2
HUMANA	-13.7	-17.5	25 1/4
A. G. EDWARDS	-13.6	68.4	32 5/8
PACIFIC ENTERPRISES	-29.1	-57.8	18
ALZA	-11.5	-38.0	44 1/4

BRIDGE INFORMATION SYSTEMS INC

MUTUAL FUNDS

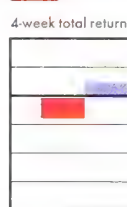
LEADERS

	4-week total return	%
FIDELITY SELECT AUTOMOTIVE	10.7	
EARTLAND VALUE	10.2	
FIDELITY SELECT SAVINGS & LOAN	8.8	
	52-week total return	%
PENNINGTON GLOBAL BIO-TECH	72.9	
AMERICAN HERITAGE	70.1	
BERWEIS EMERGING GROWTH	69.5	

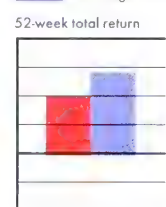
LAGGARDS

	4-week total return	%
STRATEGIC INVESTMENTS	-16.8	
UNITED SERVICES GOLD SHARES	-15.0	
FIDELITY SELECT BIOTECHNOLOGY	-11.7	
	52-week total return	%
FIDELITY SELECT ENERGY SERVICE	-24.0	
STRATEGIC GOLD/MINERALS	-22.3	
METLIFE-STATE STREET GLOBAL ENERGY	-19.1	

S&P 500



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Percentages indicate
daily total returns

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+0.75%

Treasury bonds
\$11,051
+0.34%

Money market fund
\$10,478
+0.07%

Foreign stocks
\$10,029
-0.56%

Gold
\$9,783
-0.71%

DATA RESOURCES INC

Data on this page are as of market close Wednesday, Feb. 26, 1992, unless otherwise indicated. Industry groups include S&P 500 companies only; performance and share prices are as of market close.

Feb. 25 Mutual fund returns are as of Feb. 21. Relative portfolios are valued as of Feb. 25. A more detailed explanation of this page is available on request.

LET'S WRITE OFF THE MIDDLE-CLASS TAX CUT

Washington is often accused of being isolated from the real world. But the tax debate taking place on the Hill takes inside-the-Beltway insularity to new lows.

The centerpiece of legislation now moving through Congress is a "middle-class tax cut," a notion that is dear to the House and Senate Democratic leaderships and has acquired a life of its own on Capitol Hill. The idea is to provide a windfall of \$300 a year or so to most taxpaying families, depending on which version you're talking about.

The motivation for this tax cut is political, not economic. Were it aimed at bolstering the economy, the tax bill's centerpiece would be designed to increase U.S. productivity by encouraging spending on new plant and machinery. Interestingly, opinion polls show that the proposed beneficiaries are indifferent to a tax cut. Economists of all stripes agree it would do little to stimulate growth. Even many politicians are losing interest in middle-class tax relief. The Democrats holding down the left and right flanks of the Presidential field, Tom Harkin and Paul Tsongas, belittle it. President Bush proposed such a reduction in January but reversed his position and now threatens to veto it.

An unenthusiastic House Ways & Means Committee Chairman Dan Rostenkowski (D-Ill.) is ready to push a tax bill through the House containing a temporary \$200-per-worker credit against Social Security taxes. A version of the bill to be drafted by the Senate Finance Committee will also offer a modest tax break, despite the misgivings of Chairman Lloyd Bentsen. In theory, the Democratic plans would pay for temporary middle-class tax cuts through tax increases on the rich, which President Bush threatens to veto.

The fact is that Rostenkowski and Bentsen are going along with an idea that they, and many others, know is lousy. The federal government is running a \$400 billion deficit, more than \$1,600 a year for every person in the U.S. Governments at all levels lack the money to meet pressing needs, from health care to highway repair, from education to prisons. It's time to forget the middle-class tax cut. It will do nothing to improve productivity, but it will deepen the deficit. Congress, do the right thing for a change.

THE GM-UAW RIFT THREATENS PRODUCTIVITY

For more than six months, relations between General Motors Corp. and the United Auto Workers have been deteriorating. Harsh words are understandable at a company that's in the midst of closing 21 plants and cutting 74,000 jobs (page 70). But in the past month or so, relations between management and the UAW have sunk to levels not seen since the recession of the early 1980s. The resulting acrimony could place GM's long-term competitiveness at risk:

To match the quality and productivity of its Japanese rival, the company needs active cooperation on the shop floor.

Management must accept part of the blame. It has been so intent on downsizing that it hasn't done enough to mitigate the devastating impact on GM workers—including those who face continued uncertainty. And UAW leaders are fault, too: Stephen P. Yokich, head of the UAW's GM department, has a tendency to fly off the handle. To make matters worse, the UAW holds its election of top officers this June. That tempts Yokich and other union leaders to grandstand.

The hollering could endanger the future prospects of both GM and the union. GM must adjust its capacity and costs to its shrunken market share. But to get high quality and efficient plants, the company needs workers to pitch in. GM, like many other large U.S. manufacturers, has been implementing cooperative labor relations in recent years aimed at realizing just such improvements in productivity. These had begun to bear fruit. One good example: At GM's highly successful Saturn Corp., where worker commitment to quality runs high, employees recently agreed to work 50-hour weeks to meet the strong demand for the division's cars. But the war of words is jeopardizing this progress in the rest of GM. If GM is going to emerge as a competitive company, both sides must tone down the polemics and work together.

THE ENTREPRENEUR AND THE MARKETING MAN

Successful entrepreneurs and top corporate executives typically are blessed with energy, drive, intelligence and an exceptional ability to lead. But they can be so successful that they begin to believe they have all the answers. This so-called "CEO disease" has been the downfall of too many executives—and sometimes their companies. For example, former Abbott Laboratories CEO Robert A. Schoellhorn was fired by the board in part because he refused to groom a potential successor. William C. Norrish, founder of Control Data Corp., wouldn't relinquish the reins even as the company crumbled around him. The result: once mighty computer power reduced to an also-ran.

This is the kind of problem that The Gap, the hugely successful clothing retailer, has avoided. It was founded in 1969 as a blue jeans store by Donald G. Fisher, who rode the wave of denim's popularity in the 1970s. A real estate and operations whiz, Fisher knew little about merchandising—and never pretended he did. With the company headed for trouble in the early 1980s, he brought in Millard S. "Mickey" Drexler from Ann Taylor Stores, made him president, and gave him carte blanche to turn the company around and create a whole new image for The Gap.

The result is a company that's the envy of the retail industry, and one that has produced a fortune worth \$2.7 billion in equities to the Fisher family (page 58). Drexler has drawn the lion's share of credit for the dramatic makeover, as well he should. But Fisher, who remains chairman and CEO and whose family still owns 37.9% of the company, made it happen by recognizing his limitations and not letting ego get in the way.

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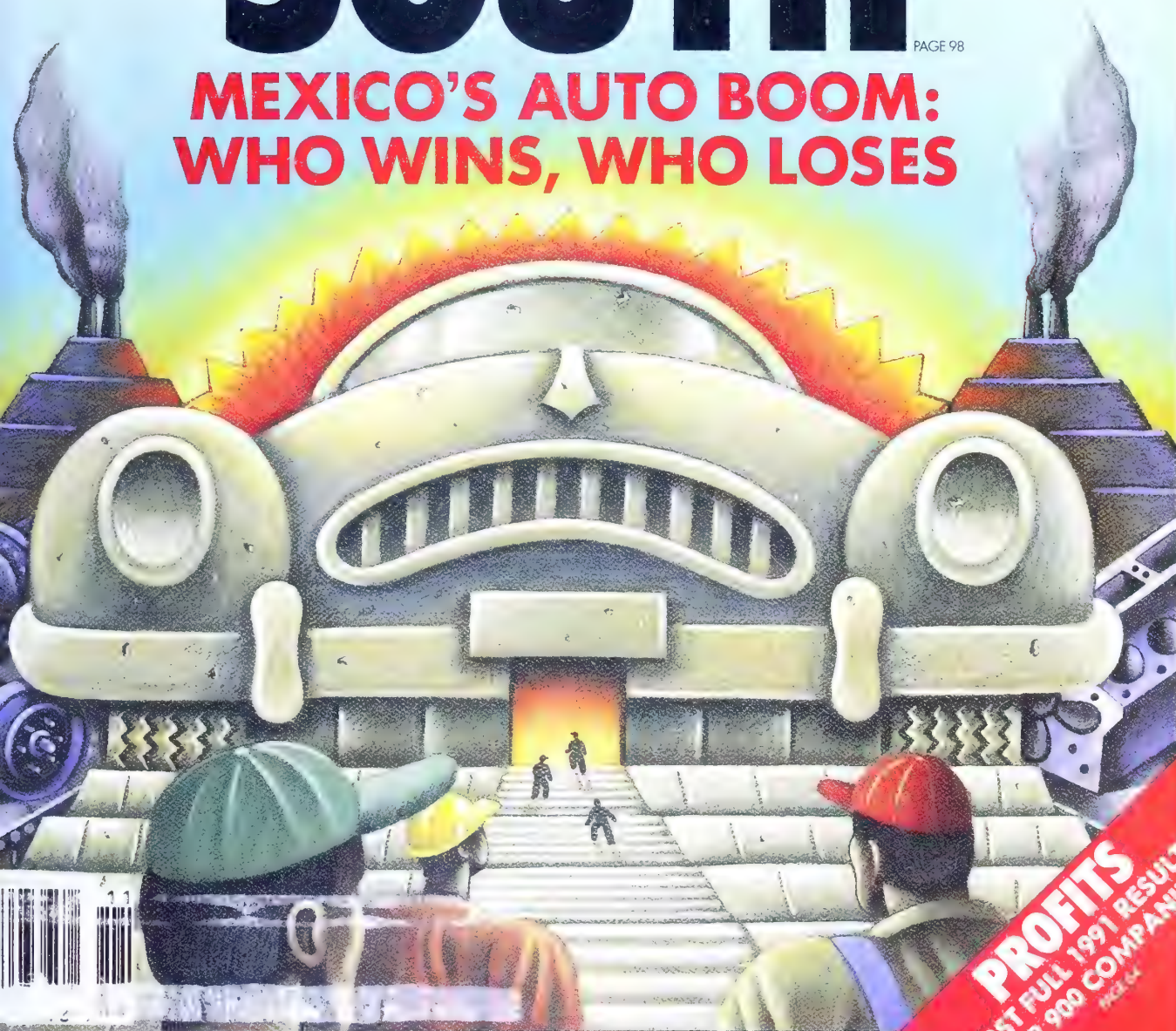
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DETROIT SOUTH

PAGE 98

**MEXICO'S AUTO BOOM:
WHO WINS, WHO LOSES**



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IN A CATEGORY OBSSE AND LIGHTER, COMPAQ V ANOTHER ADJ

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It can even instruct the notebook to save all open files to the hard drive should the battery power run too low.

And the energy-saving features in our newest notebooks go far beyond the presence of an Intel 386SL chip.

To make the most of the smarter battery, the new COMPAQ LTE Lite also comes with user-adjustable power-drain settings, and three dif-

ferent sleep modes — System Idle, System Standby, and Hibernation.

A MOST MODERN MODEM.

Our optional 9600-bps modem for the COMPAQ LTE Lite PCs would make even Alexander Graham B. proud.

The COMPAQ Enhanced 9600-bps



Internal Modem is compatible with the broad base of today's communications protocols.

Just slip the COMPAQ LTE Lite into the COMPAQ Desktop Expansion Base and you're instantly connected. Expansion slots, external ports, and mass storage bays give you immediate access to monitor, networks, hard drives, tape drives, CD-ROM and more. And all the built-in security features ensure a safe harbor for your notebook.

In modem talk, that means true V.32 9600-bps data transmission and V.42bis compression for up to 38.4 kbps throughput, as well as full support for Hayes AutoSync.

This little marvel negotiates the fastest transmission throughput that the other end of the line can muster, whether it's sending or receiving.

It even drops to a low power-drain standby state and monitors incoming signals if you're waiting for a call to come in.

Or for that matter, another modem to catch up **NOT ONLY SMART, BUT BRIGHT.**

The new, efficient COMPAQ Maxlight VGA display makes for a much brighter screen than our previous notebooks, and does it without sacrificing battery life.

Sharper graphics and text in up



ED WITH SMALLER ULD LIKE TO SUGGEST TIVE: SMARTER.

shades of gray complement an
nced video subsystem that's so
it virtually eliminates "subma-
g," better known as "where did
#%\$**# cursor go?"

A NOTEBOOK THAT'S
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ware security.

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eLock locks the hard
e, preventing access
ata even if the drive
moved.

ne-touch QuickLock
QuickBlank functions



ated inverted "T" cursor controls
n a familiar position so you don't
e to teach your fingers new tricks.

v you to quickly (sur-
e) disable the keyboard
lank the screen.

nd of course, our new
books come with a
ock slot for an optional
e lock.

With all of the above,
a 120-MB hard drive,*
f expansion to 10 MB,
ne memory, simulta-
us display, and an
iliary battery, to say
se are the best
books we've
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be more like it.



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in Canada at 1-800-263-5868, Ext. 100.

COMPAQ



Actual weight: 6 lbs. Actual dimensions: 8.5"x11"x1.75". Actually, this is the best notebook we've ever built.



ONE CEO compared
re-entering the EQUITY
MARKET to going
back home and finding an
eight-lane HIGHWAY where
MAIN STREET used to be

In short, re-entry could not be more complex.

More than ever, returning issuers face uncertainty in the marketplace. Today's investors are increasingly sophisticated and knowledgeable. Their decision to invest—or not—can make or break an offering.

To be successful, issuers must be able to access every market and every investor—institutional and individual—the world over. To access detailed, comprehensive information along the way.

THE MARKET IS COMPLEX. RETURNING DOESN'T HAVE TO BE.

Lehman Brothers works with clients to move much of the uncertainty associated with an offering.

Over the past few months, Lehman Brothers has lead-managed over \$1.7 billion in new equity. Helping domestic and international clients in categories as diverse as pharmaceuticals, high technology, banking

and retailing successfully return to market.

WHY LEHMAN BROTHERS?

Lehman Brothers is a leader in raising equity capital for its clients. Upward of \$50 billion over the past 5 years, according to Securities Data Corporation.

What is far more important than the dollar figure, however, is the depth of experience represented by that figure. For it is composed of every type of offering from every imaginable industry sector.

And while no one can predict what the market will do tomorrow, Lehman Brothers has displayed an unusual ability to foresee opportunity and to move an offering along in a very timely fashion.

Precisely the sort of vision and timing that's necessary when venturing across eight-lane highways.

If you are considering a move into the equities market, we'd like to be involved.

LEHMAN BROTHERS



NEW GENERATION: WORKERS AT FORD'S STATE-OF-THE-ART PLANT IN HERMOSILLO, MEXICO, ARE YOUNG, EAGER, AND WELL-TRAINED

Cover Story

98 DETROIT SOUTH

Americans were stunned when GM announced it was closing factories across the U. S. and Canada—while shifting jobs to Mexico. But Mexico's low-cost, high-quality work force is a natural for Detroit. The Mexican auto industry is already booming, and production may double by 2000. For the Big Three, it's a chance to regain a competitive edge. But how much will U. S. workers suffer?

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Scanning the want ads—and dealing with despair—in Owosso, Mich.

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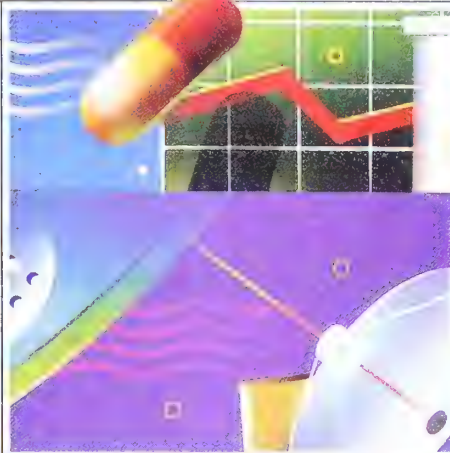
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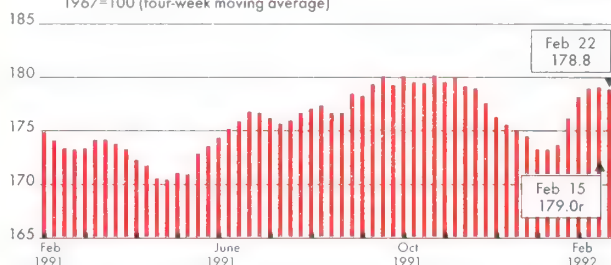
Free trade: Gain, pain, retrain
How to disarm the nuclear threat
Make sure office giving is a choice

BusinessWeek Index

PRODUCTION

Change from last week: -0.1%
Change from last year: 3.2%

1967=100 (four-week moving average)

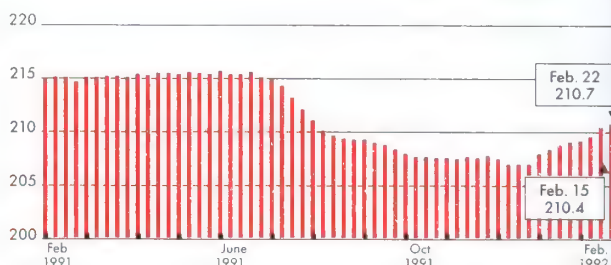


The production index dipped a bit in the week ended Feb. 22. After seasonal adjustment, electric power output fell sharply during the holiday-shortened week. Auto production posted another strong gain. Steel production rose slightly, as did crude-oil refining, coal production, and paperboard output. Lumber production also rose. Rail-freight traffic and paper output were unchanged. Before calculation of the four-week average, the production index fell to 178.3, from 179.2.

BW production index copyright 1992 by McGraw Hill Inc.

LEADING

Change from last week: 0.1%
Change from last year: -1.8%



The leading index edged higher in the week ended Feb. 22, continuing its upturn of the past eight weeks. Stock prices declined, while bond yields rose. Prices of sensitive materials fell at a faster pace, as did real estate loans. The growth rate of the M2 money supply slowed down a bit, and business failures increased. Before calculation of the four-week average, the leading index fell to 210.2, from 212.3 in the previous week.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (2/29) thous. of net tons	1,785	1,803#	2.2
AUTOS (2/29) units	109,048	117,028r#	3.1
TRUCKS (2/29) units	83,049	76,599r#	51.9
ELECTRIC POWER (2/29) millions of kilowatt-hours	54,099	54,343#	-0.7
CRUDE-OIL REFINING (2/29) thous. of bbl./day	12,223	12,483#	-7.4
COAL (2/22) thous. of net tons	19,789#	19,115	-4.7
PAPERBOARD (2/22) thous. of tons	811.3#	803.2r	6.0
PAPER (2/22) thous. of tons	773.0#	766.0	-0.5
LUMBER (2/22) millions of ft.	504.3#	497.5	4.4
RAIL FREIGHT (2/22) billions of ton-miles	20.8#	20.8	7.2

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPAA, SFPAA, Association of American Railroads.

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (3/4)	132	130	136
GERMAN MARK (3/4)	1.66	1.60	1.55
BRITISH POUND (3/4)	1.73	1.75	1.88
FRENCH FRANC (3/4)	5.66	5.61	5.28
CANADIAN DOLLAR (3/4)	1.19	1.18	1.16
SWISS FRANC (3/4)	1.52	1.50	1.35
MEXICAN PESO (3/4)	3,045	3,046	2,972

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (3/4) \$/troy oz.	350.150	348.650	-4.4
STEEL SCRAP (3/3) #1 heavy, \$/ton	89.50	89.50	-12.3
FOODSTUFFS (3/2) index, 1967=100	203.2	204.7	-3.7
COPPER (2/29) ¢/lb.	107.0	105.8	-9.6
ALUMINUM (2/29) ¢/lb.	61.5	59.6	12.8
WHEAT (2/29) #2 hard, \$/bu.	4.33	4.42	53.5
COTTON (2/29) strict low middling 1-1/16 in., ¢/lb.	51.67	50.60	-35.8

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market.

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (2/28) S&P 500	412.93	410.25	12.5
CORPORATE BOND YIELD, Aaa (2/28)	8.31%	8.33%	-6.1
INDUSTRIAL MATERIALS PRICES (2/28)	95.9	95.8	0.1
BUSINESS FAILURES (2/21)	462	458	-6.5
REAL ESTATE LOANS (2/19) billions	\$403.0	\$405.3	-1.9
MONEY SUPPLY, M2 (2/17) billions	\$3,447.4	\$3,446.3r	2.6
INITIAL CLAIMS, UNEMPLOYMENT (2/15) thous	459	452	-5.9

Sources: Standard & Poor's, Moodys, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusted data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
NEW HOME SALES (Jan.) annual rate, thous.	612	542	50.7
12 LEADING INDICATORS COMPOSITE (Jan.) index	146.5	145.2r	5.5
PERSONAL INCOME (Jan.) annual rate, billions	\$4,928.4	\$4,931.1r	3.5
CONSTR. SPENDING (Jan.) annual rate, billions	\$404.1	\$398.9r	-0.6

Sources: Commerce Dept., Census Bureau

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (2/17)	\$931.6	\$927.1r	11.1
BANKS' BUSINESS LOANS (2/19)	289.4	288.0r	-10.6
FREE RESERVES (2/19)	1,141r	896r	-28.7
NONFINANCIAL COMMERCIAL PAPER (2/19)	134.8	135.3	-7.3

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for a two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (3/3)	4.02%	3.97%	6.47%
PRIME (3/4)	6.50	6.50	9.00
COMMERCIAL PAPER 3-MONTH (3/3)	4.28	4.20	6.63
CERTIFICATES OF DEPOSIT 3-MONTH (3/4)	4.21	4.15	6.70
EURODOLLAR 3-MONTH (2/29)	4.16	4.11	6.79

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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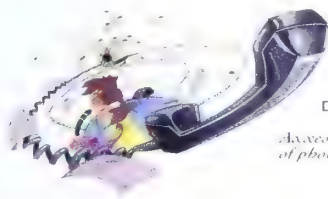
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DEAR JAPAN: SHAPE UP. DEAR AMERICA: YOU, TOO

I couldn't agree more with your editorial "Dear Japan . . . Dear America" (Feb. 10). However, I would like to point out that contrary to what most people believe, the Japanese are no longer a "homogeneous race." It is just made to seem that way by the government's use of statistics.

For example, requirements for naturalization are stiff, and those to be naturalized as citizens are "advised" to take Japanese names. The government also helps by trying not to make foreigners too comfortable. Hence, there are no laws against housing and job discrimination in Japan, and foreigners and other minorities are often denied housing and jobs on the basis of race and nationality. And although Japan is forcing through passage of the U. N. Peacekeeping Operation Cooperation bill in order to live up to its "international obligations," Japan has still not ratified the December 1990 treaty to protect immigrant workers.

In these and countless other ways, the government is doing its damndest to keep the country closed, despite the fact that this policy is now unrealistic and illogical, and downright racist. Has the government forgotten that when Japan was poor, the admission of hundreds of thousands of Japanese to such places as the U. S. and South America was a shot in the arm in the form of lower unemployment and remittances from abroad? Truly, trade isn't the only area that needs opening up—immigration needs it as well.

S. Madon
Tokyo

I enjoyed your editorial—well done! I have only one comment, and it rings loud and clear among small-business owners, including myself. We have a 7% unemployment rate and, yes, one advertisement will pull hundreds of applicants. But I defy you to find just one applicant who is given the opportunity to work and who is then able to show up every day, on time, and do the job for at least the first three months. The discipline of the eight-hour day, five-day

workweek appears to be a burden for most workers. And I haven't even touched upon the lack of pride in the workplace. Let's get back to instilling the work ethic in the American population. It seems to have left after the Great Depression. Let's get off the destructive cycle of getting as much as one can with doing as little as possible.

Riki Berger
Copiague, N. Y.

Your editorial should be required reading for all policymakers, politicians, and business leaders on both sides of the Pacific.

The Japanese must understand that adversarial trading practices cannot continue. Constant surpluses with all trading partners are unsustainable and ultimately not in the best interest of the Japanese people. They must be willing to change or risk the consequences.

In America, we must emulate the Japanese and once again be willing to invest in our future. Funds must be channeled into building our productive base by investing in plant, equipment, and human capital. This means structuring economic and tax incentives toward savings and investment rather than spending and consumption. You're right. We are at a potential "defining moment in American history." Hopefully, the current political debate can rise above the sloganeering of special interests and focus on the long-term future of America for the next generation and beyond.

Walter B. Rose
Los Angeles

FORGET THE JAPAN-BASHING AND FIX THE TROUBLE AT HOME

In his letter "How to compete with the Japanese—and win" (Readers Report, Feb. 17), T. Boone Pickens Jr. has once again given the public misinformation, ostensibly to further explain his own lack of success in Japan's business world. While he is correct that the *keiretsu* system has been successful for Japanese companies, to state that this form of business organization represents government-sponsored cartels is incorrect. And to further claim that in Japan there are no such things as shareholder, con-

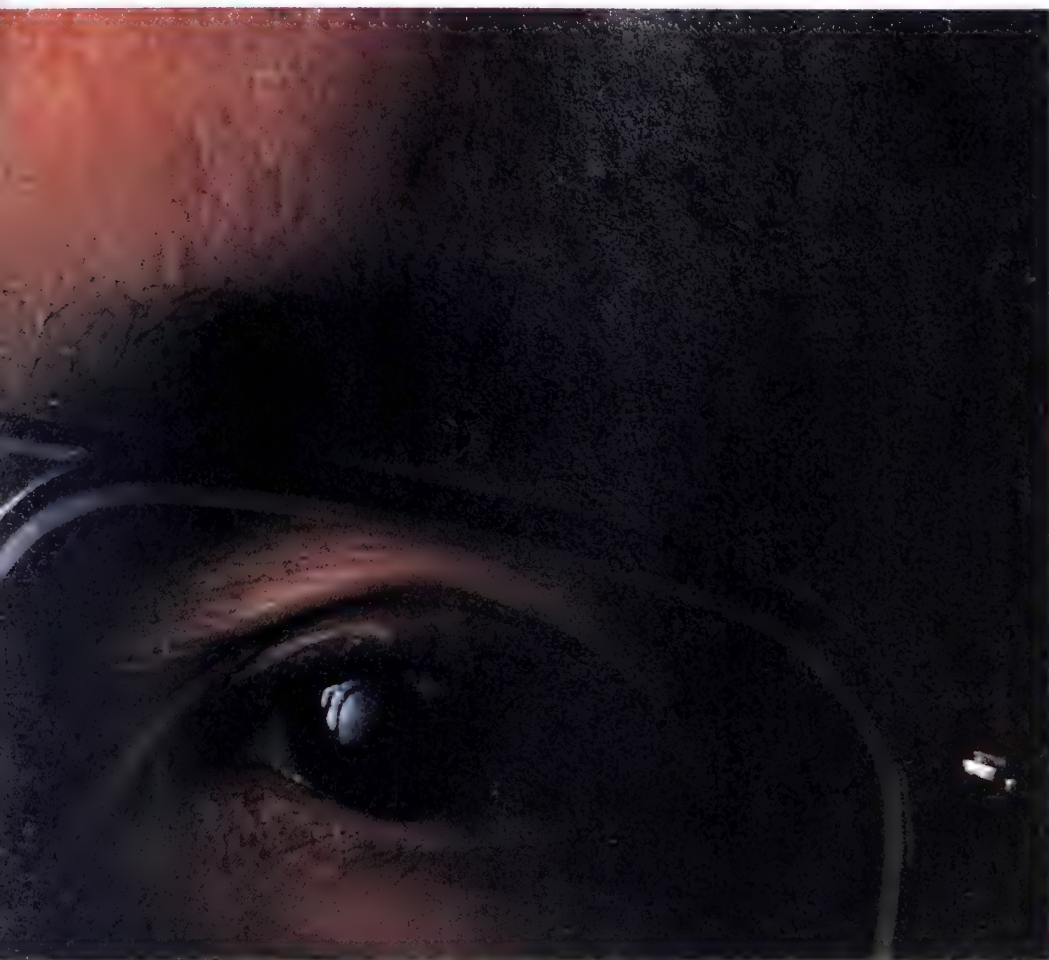
BUSINESS WEEK
MARCH 16, 1992 ***3256
ISSN 0007-7135



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The future belongs to those who question the present, to those who don't hesitate to doubt, and to those who have their own ideas. And history has proven repeatedly that one man's vision can change the world. An engineer at Mazda, Mr. Yamamoto, firmly believed in the rotary engine even though the rest of the world doubted. He



s fascinated by an engine that promised to be smoother, quieter
d more powerful than any other. Working together, he and
ners at Mazda persevered and overcame every obstacle. And in
e end, their fierce determination and intense belief carried Mazda
its historic victory in the 1991 Le Mans 24-hour race.

mazda
© Mazda Motor Corporation

Readers Report

sumer, or workers' rights is just untrue. Pickens finally hits a true chord with his comment that the U.S. won't find the answers to our trade deficits and unemployment figures in the Far East. Those are simply symptoms of problems that must be basically managed at home. But to the contrary, those symptoms do suggest that the U.S.'s traditional version of capitalism is up for review, because in its present state, it isn't working well.

Stanley P. Krueger
Tokyo

Boone Pickens' obsessive Japan bashing is sour grapes because of his inability to dominate or "raid" in his failed attempts to do business with Japanese companies. I disagree with his assertion that a young Japanese individual cannot start a business. I saw many, many, small businesses when I visited two years ago.

I think Pickens should concentrate his energies toward helping correct the mess we have created in our own country, i.e., high unemployment, inadequate health care, a litigious environment, perpetuating welfare, declining industrial base, political and business corruption, declining middle class, crime, etc., etc.,

etc. Pickens, leave the Japanese and their quality-built, reasonably priced products alone for awhile and see if you can go out and create 100 new jobs. That would be more productive than what you're doing, especially since the Japanese have created thousands of jobs in this country already.

R. Siess
San Antonio

TAX BREAKS FOR REAL ESTATE: SHADES OF THE 1980s?

Regarding "How not to build a recovery" (Editorials, Feb. 17): At a time when we have a glut of commercial real estate in the country, it seems to me that tax breaks for real estate are of dubious merit. This is especially the case when such moves might be the ingredients of a recipe for a repeat of the 1980s, precipitating further banking crises and eroding fundamental investment values.

Admittedly, some incentives are necessary to support narrow, socially desirable undertakings with high-risk profiles, such as low-income housing. As to garden-variety investments, I find myself asking: What ever happened to low-

leveraged real estate investing based on rate of return as measured solely by cash?

Stephen Fish, President
Springfield Associates Inc.
Easton, Mass.

U.S. AIRLINES, TAKE NOTE: THE ASIANS UNDERSTAND QUALITY

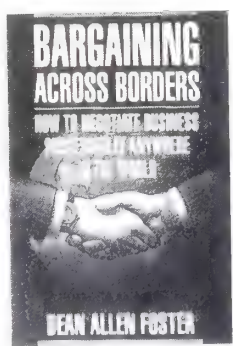
Are U.S. carriers really stressing quality ("The airlines get out the good china," Marketing, Feb. 3)? The airlines must not mistake the number of gadgets for quality service. One considerate flight attendant can outshine all the Wedgwood china and Waterford crystal on a 747-400. Attention given the passenger must come first. To remain competitive, United, American, Northwest, and Delta cannot take a backseat to the innovation of Asia's Cathay Pacific Airways and Singapore Airlines.

Teh-han P. Chow
Northridge, Calif.

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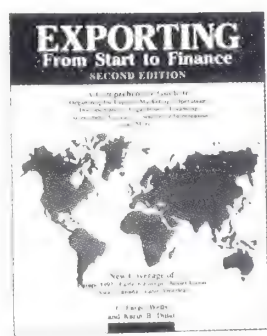
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STEALING THE MARKET: HOW THE GIANT BROKERAGE FIRMS, WITH HELP FROM THE SEC, STOLE THE STOCK MARKET FROM INVESTORS

By Martin Mayer

BasicBooks • 208pp • \$23

IS WALL STREET AT 'THE EDGE OF TRAGEDY'?

Wall Street was a relatively sleepy enclave in 1953, when Martin Mayer published his first book about the place. The New York Stock Exchange traded about 1.4 million shares a day, brokerage firms were partnerships, commissions were fixed, and a big shooter was someone who bought a couple of hundred shares. The institutional investor didn't exist, because pension funds didn't buy stock. The Dow Jones industrial average was below 300, still short of the level reached just before the 1929 crash.

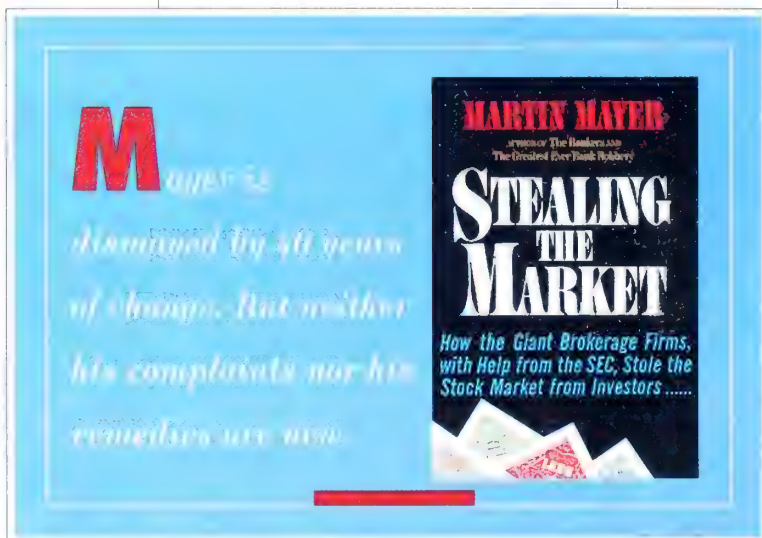
Now, after nearly 40 years and more than 20 books—including works on banking, advertising, and real estate—Mayer gives us *Stealing the Market*. Having considered the innovations of four decades—from block trading and stock-index arbitrage to the emergence of global securities dealers—Mayer somehow can't find much to like about any of them.

Wall Street-bashing is a venerable tradition. But a good bashing book must be persuasive and novel—and *Stealing the Market* is neither. Mayer's complaints, such as too much short-term trading and too much price volatility, aren't new. Neither are most of his remedies, such as taxing profits that tax-exempt pension funds garner from short-term trading. Mayer's writing is often dense, and the quotes he uses, rather than supporting his case, are sometimes just baffling.

Mayer contends that big institutional investors and brokerage firms—with the complicity of cowering government regulators—have changed the market in ways that disenfranchise individual investors and distort securities pricing. As a result, he says, the markets no longer perform their primary function of helping "decision-makers in the real, non-financial economy to determine where the nation's savings should be invested."

That's a thin reed on which to build a book. True, the valuations that investors place on publicly traded companies influence corporate decision-making. But the

24 brokers who formed the NYSE in 1792 didn't set out to advise decision-makers on allocating the new nation's scarce capital. They organized to provide liquidity—to ensure that those who made investments could sell them—and to make a profit by doing so. Without such liquidity, those with capital would be loath to invest it or would demand far greater returns, raising the cost of capital.



Admittedly, Mayer's contention that the market has been "stolen" from investors is alluring. But he fails to demonstrate how our wallets have been lightened. For instance, he notes that institutional investors now trade blocks of stock privately, via an electronic network, rather than on the stock exchange floor. Mayer implies that this harms the individual, but he never explains how.

It is certainly true, as Mayer argues, that the regulatory structure has failed to keep up with the markets' growth. But that's not entirely the regulators' fault; there has been a public policy shift toward deregulation. Moreover, Mayer ignores the justice Wall Street dispenses on its own. Drexel Burnham Lambert finally collapsed when the rest of the Street refused to deal with it. Salomon Brothers has been severely wounded since it was revealed that the firm made bogus bids at U.S. Treasury auctions. Although Mayer treats the big brokerage firms as a monolithic cartel, they are tough rivals and don't hesitate to exploit one another's missteps.

If the market has come "to the edge of tragedy," as Mayer writes, investors don't seem to know or care. They're enjoying the market's bounty. In 1991, for instance, the Dow Jones industrial climbed 24.5%; the average equity mutual fund, 33.1%. Returns from the 1980s when much of what annoys Mayer took shape, don't qualify as tragic, either. During that decade, the number of individuals who owned stock, directly or through mutual funds, rose 70%, to 5 million. Millions more own stock indirectly, through pension plans.

Indeed, it seems that most people long ago figured out what Mayer writes now. The individual doesn't stand much of a chance competing with Wall Street's behemoths. But most have hit on their own solution: Entrust your money to one of

the institutional investors and let those with training, experience, and resources battle it out.

That may not be Mayer's idea of how the market should work. But bringing back the market of 1953 won't work, either. Like it or not, the big institutions and brokerage firms perform a critical economic function. Last year, corporations sold \$48 billion worth of equity capital on Wall Street, raising cash to pay down debt and meet the challenges of the 1990s. It's unlikely they could have done so the old way,

selling shares a hundred at a time to mom-and-pop investors. Sure, there's room for reform on Wall Street. But by and large, the system still works.

By JEFFREY M. LADERMAN

Associate Editor Laderman writes about the stock market and mutual funds.

BOOK BRIEFS

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By Peter L. Bernstein

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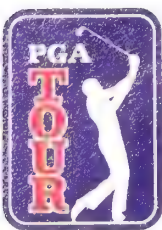
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THE PLAYERS

WHEN STEVE ELKINGTON HIT A 3-IRON 208 YARDS TO WITHIN 15-FEET OF THE hole at No. 18 Sunday and sank the birdie putt to win the 1991 PLAYERS Championship, it was another storied moment in the short, but illustrious history of the event.

And, when this significant event is contested March 23-29, 1992 at the TPC at Sawgrass Stadium Course, the world of sports will again take notice.

Since arriving at its permanent home at the TPC at Sawgrass in Ponte Vedra, Fla., in 1982, THE PLAYERS Championship has been at the pinnacle of professional golf. But, that was expected of a tournament played on a golf course specifically built for the event and featuring the strongest field in the world.



Steve Elkington

While he was still competing on the PGA TOUR, and as a Player Director on the Tournament Policy Board, TOUR Commissioner Deane Beman had a plan for a unique tournament in professional golf. Beman envisioned a course for players and spectators alike. The course would be owned and operated by the PGA TOUR and its members; and would provide golf fans with an unobstructed view and

full access at a tournament.

"I felt the TOUR needed a permanent site and some roots somewhere," Beman said in a 1980 interview. "Secondly, I felt the way to build (THE PLAYERS) into the TOUR's most important tournament was to own and control our own course and build a facility that was better than anyone else had.

"I also felt that the TOUR had benefited so

much from everybody else's innovations and here was a chance for the TOUR to be innovative. We feel we are going to be the proving ground for all our tournaments."

The uniqueness of the Pete Dye-designed 415-acre, par-2 course was unveiled at the 1982 tournament. Only about 45-acres — compared to roughly 140 at other courses — have to be maintained because of natural waste areas on most holes. Major spectator mounds throughout the course — some as high as 30-feet — provide a front row seat for every fan.

The signature of the Dye/Beman creation is the par-3 island hole No. 17. Recognized throughout the world, the hole has drawn praise and ire of the professional and amateur alike. Not a long hole at 132-yards from the back tee, an estimated 38,000 balls find the water every year.

"No. 17 is the easiest par-5 on the course," said John Mahaffey after a windy round in 1984.

The design of the course, the outstanding field, and the prestige of being THE PLAYERS Championship winner — including a 10-year exemption — have combined to create several of the most memorable finishes in PGA TOUR lore.

In the tournament's debut in 1982 at its new permanent home, the golfing world was overwhelmed. The plans on the drawing board worked to perfection in a tournament setting. The weekend festivities were crowned when champion Jerry Pate took Beman and Dye for the most historic swim in the annals of golf.

In 1983, 24-year-old Hal Sutton won the event despite

The victor in 1989 was TOUR veteran Tom Kite who added his 12th, and most prestigious crown to his remarkable career. Kite held off a charging Chip Beck the final day. Jodie Mudd stared adversity in the face — in the guise of No. 17 — and won in 1990. Mudd came to the hole with



Above: Fred Couples, 1991 PGA TOUR Player of the Year
Left: The 18th hole at the TPC at Sawgrass, Ponte Vedra, Florida

a one stroke lead over Mark Calcavecchia and birdied the infamous par-3 to secure the title.

While the tournament has provided fans with many highlights, it, like other PGA TOUR events, has also given much to the community. Since 1977, the tournament has given nearly \$5 million to local area charities. Among those that have benefited are Nancy Reagan TPC Village for ado-

CHAMPIONSHIP

starting the final day four strokes back. In 1984, youth was again served when Fred Couples won the second tournament of his career. Couples set a course record in the second round with a 64 and defeated Lee Trevino by one stroke. Despite not beginning his golfing career until age 18, Calvin Peete reached the highest echelon of the game in less than 20 years with his 1985 win. Peete posted four 60 or better rounds and broke the then-tournament record by three shots with his 274 win.

In 1986, Mahaffey proved his mettle by making up four strokes in the last eight holes before winning the tournament with a gutty par putt on No. 18. The 1987 PLAYERS Championship was a classic golf duel staged by Sandy Lyle and Jeff Sluman. Both players birdied one of golf's premier finishing holes to force a playoff that Lyle eventually won in the third extra hole. In 1988, hometown hero Mark McCumber established the current tournament record with a 15-under 273 including an opening round 65. McCumber later admitted that, "he knew half the people in the gallery."

lescent drug and alcohol abuse, TPC Scholarship Fund for college bound students, Dreams Come True, and the Boys and Girls Club. And although the golfers grab the headlines, the unsung heroes of the tournament are the volunteers. Nearly 1,200 strong, the volunteers' duties range from transportation and trash removal to handicap shuttle. The tireless work of this unpaid army helps the tournament contribute valuable funds to local worthy causes. ■

THE PLAYERS CHAMPIONSHIP TELEVISION SCHEDULE

Thursday, March 26	USA Network 4 p.m. to 6 p.m. Repeated 9 p.m. to 11 p.m.
Friday, March 27	USA Network 4 p.m. to 6 p.m. Repeated 9 p.m. to 11 p.m.
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futures markets, options on futures, modern portfolio theory, and other crucial props in today's global financial markets. A generation of investors is benefiting from the academics' most crucial ideas: the importance of portfolio diversification, the link between risk and reward, and the inherent difficulty of trading to best other skilled players in a competitive market.

Peter L. Bernstein's *Capital Ideas* is an enjoyable tour through this continuing revolution. An economic consultant and longtime market participant, Bernstein tells his tale largely through sketches touching on the background personalities, and insights of financial innovators. At times, the story meanders and the language falters, but Bernstein's approach does convey many aspects of change in the financial market for the nonacademic, nonmathematical reader.

His exploration begins in 1900, with the work of Louis Bachelier. A French mathematician ignored in his time, Bachelier, as a doctoral student, wrote an extraordinarily dissection of why prices in the capital markets are impossible to predict. Another obscure player was astrophysicist M. F. M. Osborne, who in 1959 wrote about the random character of stock prices—in *Operations Research*, a Navy Dept. journal. It took the diligent work of economists and finance specialists such as Harry Markowitz, William Sharpe, James Tobin, and Paul Samuelson to expand on such insights and eventually transform the markets.

Many economists, for instance, championed the idea of investing by buying the market—an index fund—rather than relying on an individual's stock-picking ability. The trust department at Wells Fargo Bank was among the first to latch onto the idea—and became a global money-management juggernaut. And money manager Barr Rosenberg did yeoman work tying academic theories to real-world investment.

Much good has come from this revolution, Bernstein asserts, and he's right. Because we understand better how the markets work, we can manage money and hedge risk better. Bernstein also argues cogently that many attacks on innovation are suspect: anti-intellectual, impractical, and rooted in nostalgia. Still, readers concerned that razzle-dazzle trading techniques could lead to a market crash as severe as 1987's may question Bernstein's optimistic view. After all, until Bloody Monday, portfolio insurance was an acclaimed innovation—and it now shares blame for the crash. But that debate only makes this tale more fascinating.

BY CHRISTOPHER FARRELL

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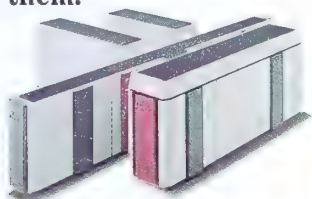
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WITHOUT GROUND RULES, IT WILL BE OPEN SEASON ON OPEN MARKETS

BY ROBERT KUTTNER



The GATT talks must move toward a pact in which poor countries gain freer access to developed nations' markets in return for agreeing to play by the tenets of Western capitalism

Two uncomfortable truths are dawning on America's free traders. The first is that if the world is going to be one giant market, it will have to be under a single system of rules. Otherwise, the most opportunistic nations in the system will simply take advantage of relatively open nations, including the U.S. Secondly, it is not "protectionist" to insist that other nations, which benefit from a relatively open system, take steps to ease their own protectionism. Without greater balance and symmetry of access in the global system, the overall constituency for open trade will melt away.

A good illustration is the protection of intellectual property, a nontraditional issue not even part of the General Agreement on Tariffs & Trade agenda until 1986. Its inclusion acknowledged that open trade requires not just tariff reductions but a common framework of commercial rules. If relatively high-wage nations, such as the U.S., are to retain significant comparative advantage, it must be on the basis of technological leadership. The U.S. remains the world's leader in scientific breakthroughs and commercial patents. But if this advantage is to accrue to the American companies that invest in the technology, it must not be pirated. Otherwise, the opportunity to realize returns on the investment is undercut, as is the incentive to invest.

Not surprisingly, poor developing countries see things differently. Until recently, most of these countries lacked even a rudimentary system of Western-style patent protection. They see industrial piracy as a means of economic development and as a strategy of technology transfer. Moreover, in the case of certain high-technology products, such as pharmaceuticals, these countries also claim a special humanitarian need to manufacture life-saving drugs locally at prices their people can afford.

NO PRETENSE. Far from being an open-and-shut case of common theft, this strategy has a venerable history. The American textile industry began in 1790, when an English inventor named Samuel Slater pirated the technical specifications of Richard Arkwright's famous power loom at Nottingham and duplicated it at Pawtucket, R.I. But piracy was less of a dilemma in the 19th century because there was no pretense that every country should practice free trade or that the world constituted a single integrated market. Accordingly, most countries constructed high tariff walls.

In recent years, however, as the world has increasingly become one big economy, it is only fair to insist that nations that enjoy access to the huge consumer market of devel-

oped nations play by more nearly common rules. Like other laws, these must be devised, negotiated, and brokered on the basis of mutual interest. Unfortunately, the GATT is not really designed to achieve this outcome. It can only operate by consensus: It has no extraterritorial authority, much less a world court of trade, and its members include nations that practice markedly different brands of capitalism. Between the U.S. and Canada, which are supposedly parties to a free-trade agreement, there are major differences even in domestic intellectual-property law.

As the negotiations have unfolded in Geneva, the U.S. has made surprising progress in getting developing countries, led by India and Brazil, to acknowledge the need for a common framework of intellectual-property protection. However, in the draft agreement, the price of this acceptance is a prolonged phase-in period. Developing countries remain free to pirate, while the U.S. must give up recourse to its own domestic-trade and patent law as antipiracy measures.

UNHOLY ALLIANCE? In fact, the U.S. has secured the most dramatic breakthroughs in getting nations such as Mexico and China to pass intellectual-property protection by getting tough on a bilateral basis, not through reliance on the GATT. Key American industrial supporters of the intellectual-property initiative—the pharmaceutical, software, and entertainment industries—are now wondering whether the proposed deal is worth the candle. Conversely, according to India's Ambassador to the GATT, B.K. Zutshi, the Indians feel that they are making a major sacrifice to the American GATT agenda with little in return from the trade round. And some American diplomats see an unholy alliance in which the Europeans back the Indian stance on relatively weak intellectual-property protection, while the Indians back the Europeans' resistance to further concessions on agriculture.

Clearly, if the GATT is to keep moving forward at all, a monumental effort to achieve common commercial rules is required. We need a grand bargain in which poor countries gain freer access to developed nations' markets, and in return, they agree to play by the rules of Western capitalism. But that would still necessitate the acknowledgement that poor nations have special needs—for cheap medicines, debt relief, and Western capital and expertise, public as well as private—issues that are outside the scope of the GATT. A healthier global-market system requires a great deal more than a crusade for *laissez-faire*. It requires heroic statecraft as well as open markets.

ROBERT KUTTNER IS CO-EDITOR OF THE AMERICAN PROSPECT AND AUTHOR OF THE END OF LAISSEZ-FAIRE

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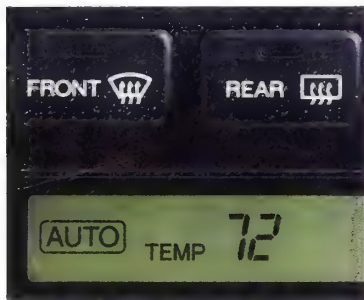


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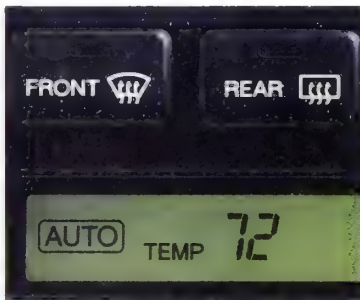
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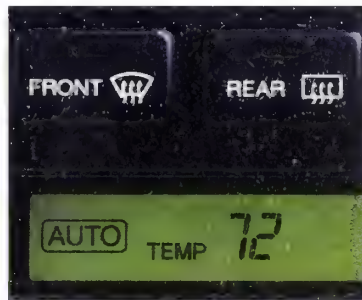
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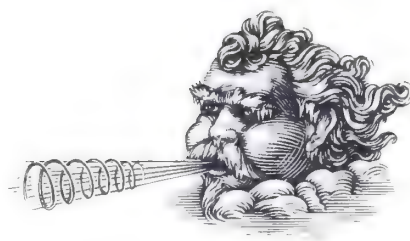
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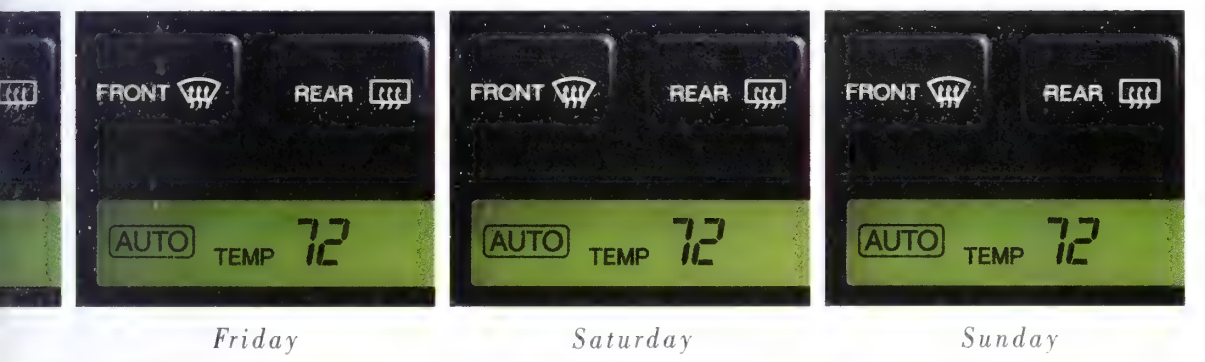
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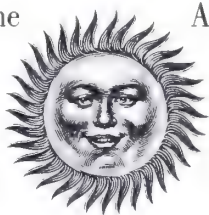


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BY GENE KORETZ

SHUTTERED BUSINESSES EVERYWHERE—AND THE CARNAGE ISN'T OVER

The economy may have posted modest growth since the first quarter of last year, but the mortality rate of U.S. businesses continues to soar. Dun & Bradstreet Corp. reports that a record 87,266 businesses went belly-up in 1991, 44% more than in 1990. At the same time, the dollar liabilities associated with business failures skyrocketed, from \$55.5 billion in 1990 to \$108.8 billion—nearly 2% of gross domestic product.

"The recession, coupled with the vast amount of debt accumulated in the 1980s," says D&B economist Joseph Duncan, "has taken its toll across the U.S." Duncan notes that business failures increased in every region of the country last year and in every major U.S. industry, from services to manufacturing.

The surge in failures is ominous for several reasons. Because new businesses have a high mortality rate, rising failures in the past have often reflected a healthy pickup in new business forma-

tioned with the downturn in new business formation, casts a pall over the near-term job outlook.

As Duncan sees it, the business mortality rate is unlikely to fall for some months. For one thing, the high level of liabilities generated by last year's failures almost guarantees another round of fatalities, as creditors and suppliers of businesses that expired find they lack the wherewithal to survive. And business becomes more difficult as companies tighten credit terms to avoid getting burned by troubled customers.

From this perspective, it's hardly a surprise that failures so far in 1992 are running about 25% above last year's pace. "Even if a recovery takes hold in the next few months," says Duncan, "a lot of businesses are likely to find that the pickup is too little and too late."

A LOT OF TAXPAYERS ARE WIRED FOR EARLY REFUNDS

One reason consumer spending has been strengthening a bit lately may be that tax refunds have been front-loaded. Economist Louis Crandall of the Wall Street consultants R.H. Wrightson & Associates notes that this year's tax refunds through February were up 36% or some \$4.1 billion over last year and \$7 billion over the average dollar amount in the previous two years.

Rather than the result of a deliberate policy decision, says Crandall, the surge in early refunds essentially reflects an increase in electronic filing of returns. The Internal Revenue Service's nationwide electronic filing program is now in its third year, and volume has been picking up dramatically. Taxpayers are choosing to go the electronic route for two reasons: It takes only two weeks of processing before they receive their refunds, rather than four to eight weeks for an ordinary paper return, and the refunds can be wired directly into their bank accounts.

Of the \$15.4 billion in refunds issued by the Treasury through Feb. 28, Crandall figures that as much as \$9 billion will have been deposited directly into taxpayer bank accounts. That's 50% more than the \$6 billion or so deposited during the same period last year.

While the pickup in refunds may have already affected spending a bit, the strongest impact should show up this month. That's because the biggest surge in electronic filing took place in the last half of February. Crandall notes that "if a mere 1% of the recent increase in refunds were put toward auto down pay-

ments, the new-car sales rate could jump by as much as a quarter of a million units on an annualized basis."

IN EUROPE, CASH EASES THE PAIN OF GETTING FIRED

As some U.S. executives have learned the hard way recently, it's possible for a middle manager who loses his job to come away with little more than a pat on the head and a few weeks' pay. But that's not true in Western Europe. According to William M. Mercer Inc., a benefits consulting firm, relatively high termination benefits in most European countries are set by law and include such items as termination payments of full salary for a notice period during which severed employees are usually not required to show up for work.

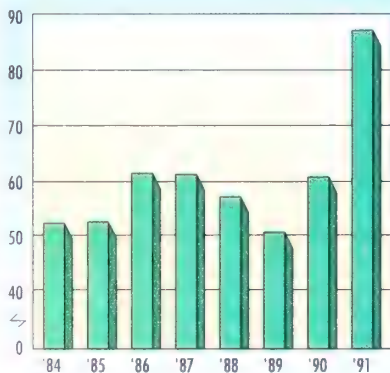
Mercer calculates, for example, that a typical 45-year-old European middle manager, with 20 years of service and a salary of \$50,000, would be entitled to termination benefits ranging from \$94,000 to \$130,000 in Belgium, Spain and Italy—and from \$25,000 to \$38,000 in the Netherlands, Germany, and Denmark. And that doesn't include extra benefits mandated for group dismissals or embodied in union contracts.

By contrast, Mercer estimates that a U.S. middle manager, earning \$50,000 a year with 20 years of service, typically walks away with about 20 weeks severance pay or some \$19,000. But the firm also notes that since payments are determined by individual corporate policy, such employees can be legally terminated with nothing more than a handshake.

WHY LOWER INFLATION COULD HURT CHANCES FOR RECOVERY

Although falling inflation is generally good news for the economy, it can have a negative aspect when it is combined with rising interest rates during a recession. Economist Lacy H. Hunt of Carroll McEntee & McGinley Inc. points out that the real inflation-adjusted yield on 30-year Treasury bonds has jumped from under 5% last quarter to nearly 5.4% recently. That's because nominal yields moved higher at the same time that consumer inflation continued to slow. "The sharp runup in real long bond yields is particularly worrisome," says Hunt, "when you remember that real yields below 2.5% fostered recovery in five of the last six recessions."

BUSINESS FAILURES GO THROUGH THE ROOF



▲ THOUSANDS OF FAILURES
DATA: DUN & BRADSTREET CORP.

tions. In recent years, however, new business incorporations have been declining, indicating that the latest failure wave is mostly a hardship phenomenon.

The implications for employment gains are particularly grim. Most business failures involve relatively small operations—61% of last year's failures accounted for less than 1% of the total \$108 billion in liabilities that failing businesses left in their wake. And small business not only employs at least half of the nation's private work force but also accounts for the vast majority of employment increases. Thus, the high failure rate, com-

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The United States was the first democracy in the world in which the people, not party leaders or elected officials, chose their candidates for high office. The American system of presidential primaries is elaborate, cumbersome, and at times enormously frustrating. It is also intensely democratic, the product of nearly a century of struggle by reformers whose faith in the people has exceeded their faith in political elites.

Throughout the nineteenth century, presidential candidates were chosen by a variety of methods, none directly responsive to popular sentiment. Until the 1820s, members of Congress gathered in party caucuses and chose presidential nominees. Beginning in the 1830s, candidate selection shifted to national party conventions; delegates were generally chosen by elected officials and party leaders in each state.

By the early 20th century, however, there was growing dissatisfaction with the process. Reformers, alarmed at the growing power of party organizations and the growing political effectiveness of great new industrial organizations, began to demand that the people have a more direct voice in choosing presidential candidates.

Governor Robert M. La Follette of Wisconsin, one of the great figures in the history of American reform, played a critical role in building the early primary system.

In 1905, he persuaded the Wisconsin legislature to establish a direct popular election—controlled by state officials, not party organizations—to select delegates to national political conventions. “No longer,” he promised, “will there stand between the voter and the official a political machine with a complicated system of caucuses and conventions, by the manipulation of which it thwarts the will of the voter.” Several years later, Oregon established a primary in which voters expressed a preference for a particular candidate, whom delegates would be obligated to support through the first ballot at the convention. Most other primary states eventually adopted the Oregon system.

By 1912, 12 states had established mandatory presidential primaries, and it seemed only a matter of time before the system would sweep the nation. Theodore Roosevelt, running for president in 1912 on a third-party ticket (having been denied the Republican nomination that year despite winning every primary), called for a national presidential primary to eliminate the role of party “middlemen” altogether. President Woodrow Wilson called for the same thing a year later. In the meantime, eight more states

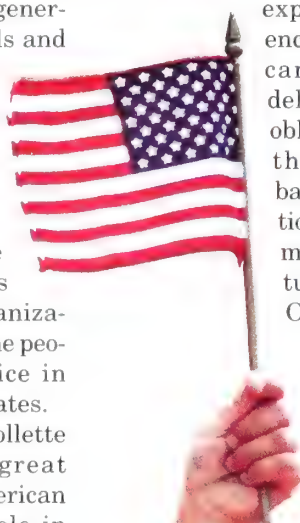


The 19th Amendment to the Constitution permitted all women to vote, starting with the 1920 election.

established their own presidential primaries; by 1916, there were 20 such elections.

But soon after World War I, a reform energies subsided, the presidential primary system went into something of an eclipse. From 1917 to 1945, only one additional state—Alabama—created a presidential primary. In the meantime, eight states abolished their existing primaries; and the primaries that survived had little effect on the nominating process. Many were simply devices for pledging delegates to a “favorite son,” who had no hope of nomination but could use his delegate strength to exercise power at the convention. In North Dakota, a commission examining the state’s 1932 primary (which no major presidential candidate had chosen to enter) concluded that “so far as expressing the preference of the . . . voters of the state was concerned the election was a farce which cost the taxpayers \$135,635.” By 1940, the presidential primary system had reached its lowest ebb since 1912, with little-noticed elections in only 13 states.

For the primary system genuinely to succeed, it was clear, candidates and voters would have to believe not only that primaries were democratic, but that they were effective. In the 30 years after World War II, a series of dramatic primary



campaigns gradually proved that the system could make a difference. In 1948, for example, Harold Stassen, the young ambitious governor of Minnesota, launched a credible, and nearly successful, challenge to the Republican front-runner by defeating Governor Thomas Dewey in New York in a series of early primaries. Four years later,

the primary system has

never been static

and it will almost certainly

continue to change.

Dwight D. Eisenhower, a political neophyte, proved his vote-getting potential by running well in the Republican contests. And in 1960, John Kennedy overcame doubts of some party leaders by winning a series of crucial victories in that year's Democratic primaries. There were still only 16 states with primary elections, and nearly two-thirds of the delegates to both party conventions were still chosen by other means. But it was becoming difficult for party leaders in states without primaries to ignore these demonstrations of voter sentiment. In the late 1960s and early

1970s, the United States experienced a rise in popular democratic sentiment unmatched since at least the beginning of the century. It was fueled in part by dissent: by the civil-rights movement, the New Left, and protests against the Vietnam War. It was also a result of a much broader popular disillusionment with party leaders and elected officials. A crucial event was the 1968 Democratic convention, in which Vice-President Hubert Humphrey received his party's nomination without having run in a single primary. Like reformers in the early 20th century, supporters of other candidates demanded changes in the system to ensure that in the future the people, not the "bosses" and the "establishment," would control the nominating process.

In the years after 1968, the reformers enjoyed great success. By 1980 the number of presidential primaries had risen from 15 to 35; and in 1992, there will be 38 primaries, choosing over 80% of the delegates. Indeed, so decisive has the primary system become that the party convention now plays virtually no role in selecting a candidate. In the last five presidential elections, candidates have almost always locked up the nomination well before the end of the primary season.

But the success of the primary system has created its own problems. Critics complain that voters in a few states with early primaries exercise disproportionate influence; that the process of running in multiple primaries is too expensive

and favors candidates able to raise large sums of money; that independent voters are excluded from voting in most states (one reason why voter turnout in primaries is even lower than the dismal turnout that has become the norm in general elections). Some critics



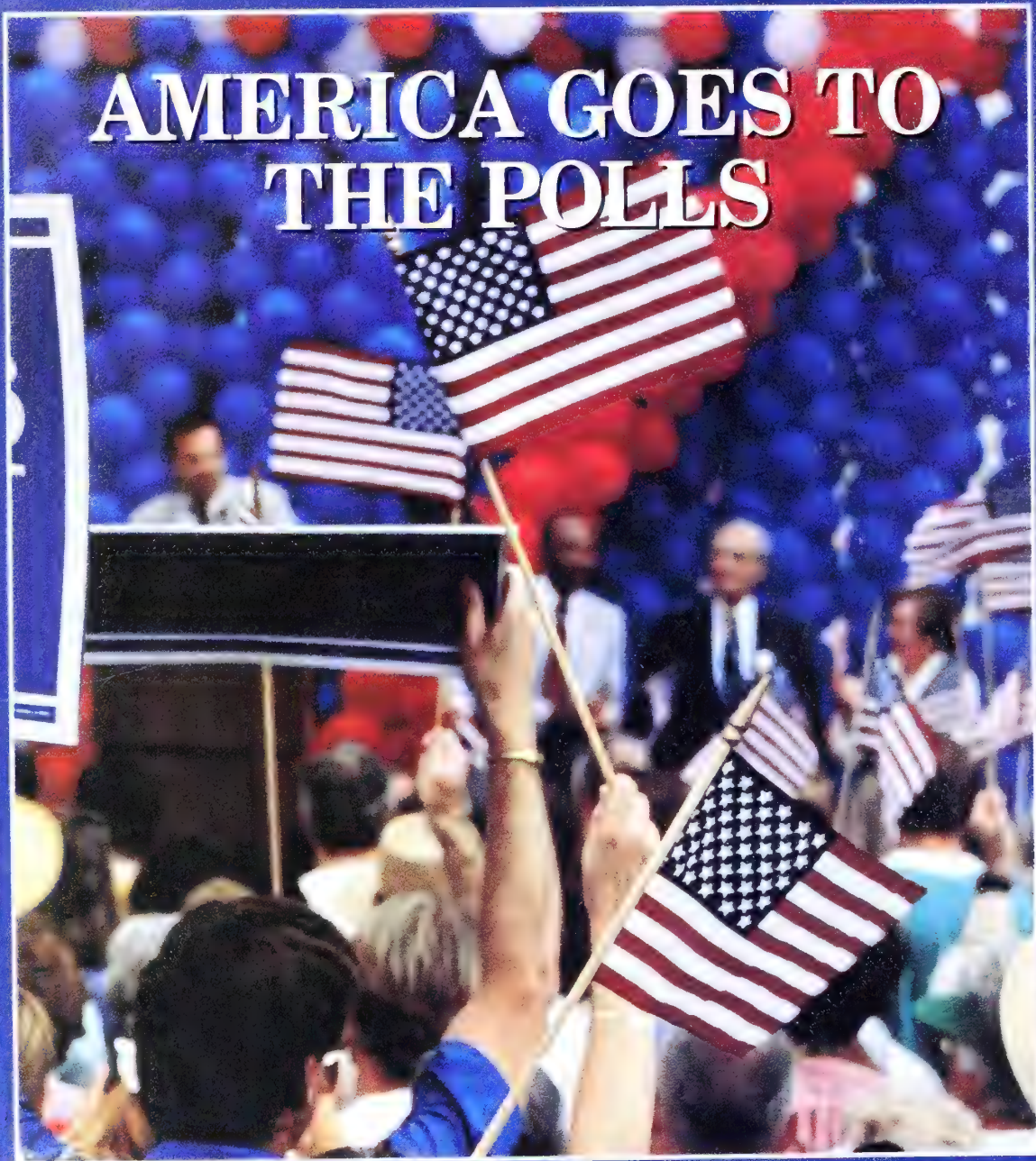
have revived the call of Theodore Roosevelt and Woodrow Wilson for a national primary; others advocate restoring significant power to party leaders and the convention itself. The primary system has never been static, and it will almost certainly continue to change. But there is almost certainly no alternative to a selection process based on popular participation. In the end, only informed and active voters can make the system succeed. ■

This text was written by Alan Brinkley, Professor of History, Columbia University



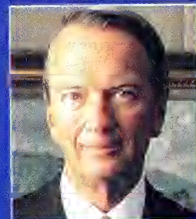


AMERICA GOES TO THE POLLS



This brief history of American presidential primaries is the first of four such essays that ITT will present in the course of this election year. Whatever our political beliefs or our party affiliations, we all have a stake in the outcome of our electoral process. And one way to encourage broad participation in the political process, we

hope, is to help Americans understand how the system works and where it came from. Its importance cannot be over emphasized; our present and future depend on it.



Rand V. Araskog, Chairman, President, and CEO, ITT

First in a series of messages from

ITT

Letter From New Haven



ALL STUDENTS PAY? THE ADMINISTRATION IS TRYING TO CUT JOBS—AND WHOLE DEPARTMENTS

AT YALE, BUDGET-CUTTING 101 IS NO GUT COURSE

Yale University's Hall of Graduate Studies has been home to some of the country's most renowned thinkers. Leading authors of American history and architects of modern literary theory have tutored their successors in gloomy rooms. With its Gothic tower and grassy environs, HGS, as everyone calls it, has provided a peaceful setting for scholarship for 60 years.

This semester, however, nearby helps Gate no longer seems such a stalwart guardian of the campus. The real world has intruded. Yale, one of America's great institutions, finds itself in the same plight as the rest of the nation—feeling the pinch. There's a yawning budget gap and, to close it, the administration is taking a cue from Corporate America: It plans to downsize by cutting jobs and whole departments.

While undergrads have been little affected, serenity has been sorely lacking at HGS lately. Already angry because they have little input in university decisions, grad students have dropped their books for days at a time to picket the hall. Up on the third floor, linguistics professors are desperately lobbying to save their department from annihilation. The reluctant annihilators, Provost Frank M. Turner and his five assistants, are down on the ground floor, trying to

sell drastic cuts to an increasingly disaffected faculty. Meanwhile, the faculty is resorting to tactics that would have done the old Kremlin proud, forming committees on top of committees to deal the plan death by review.

Come hell or bureaucratic high jinks, Turner must plug Yale's \$8.8 million budget hole. This he will do, he says, by making permanent cuts in overhead. His plan is to eliminate 10% of faculty positions through attrition, which would close the gap and free up funds to renovate Yale's beautiful but crumbling buildings. "If you're going to cut, you inevitably make judgments that cannot be universally approved," says Deputy Provost Charles H. Long.

SOLIDARITY. Until a few weeks ago, the refrain outside HGS was: "Yale, Yale, negotiate. You're becoming second-rate." The voices of the grad students mingled with those of custodial and clerical workers, who had been working under an expired contract. The grad students, seeking their own union to lobby for better pay and to gain more voice in decisions that will shape Yale's curriculum for years, aligned with the workers. In the end, Yale negotiated a settlement with the union on Feb. 19. But, in a show of solidarity with the grad students, union members stayed off their

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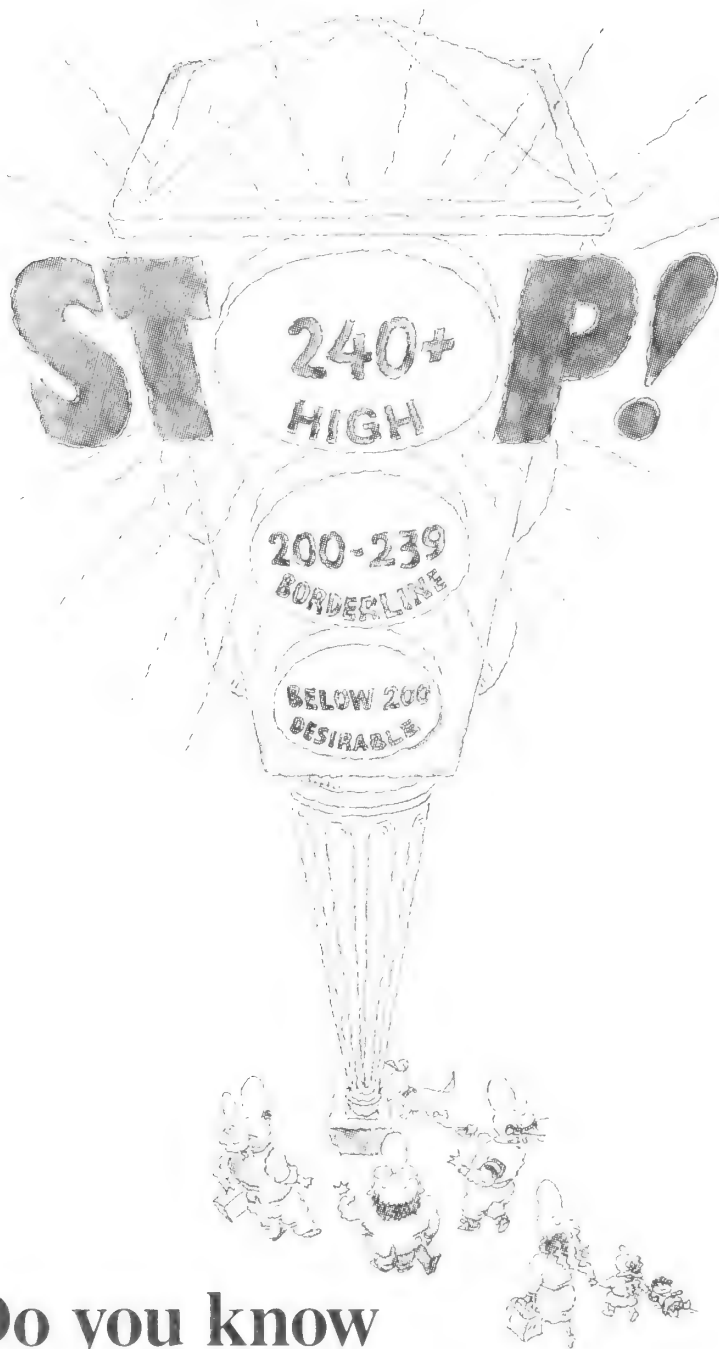
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jobs for three days anyway. In economically depressed New Haven, that was quite a statement. "They need to work," says Jacob L. Buchdahl, an undergraduate who works part time in the dining hall.

With the strike threat out of the way, the university's largest problem is getting its faculty to accept painful cuts. Much of the money is needed to rehabilitate the campus infrastructure. In some dorms, ceilings leak, cockroaches do everything but type term papers, and the heating is so Dickensian that students sometimes sleep in parkas.

But people, not buildings, are the lifeblood of the institution, the professors insist. And they can't see why Yale should shell out some \$400 million to redo its buildings in the midst of a budget crisis. Why not dip into the \$2.5 billion endowment a bit more? That's what Princeton University did, and it managed to merely nibble at its academic programs. Skip some repairs, the professors argue, and you can leave the distinguished faculty almost untouched.

As it stands now, applied physics, linguistics, and operations research—

Yale wants to fix crumbling buildings, but the faculty wants the school to skip the repairs and maintain staff

mathematics subfield with business applications—are to be eliminated. Engineering and sociology were given last-minute reprieves, but they'll still be deeply slashed. Even though faculty cuts and department downsizing will come through attrition, there's little wonder why professors feel threatened. If the plan goes through, they'll have to teach more classes and have less time for research, further dimming chances for associate profs to win tenure.

And what do the cuts mean to the average undergrad? Not much. Varsity wrestling is out and freshmen may rethink engineering majors, but upper-classmen, except for a handful of linguistics students, won't have to change their plans much. I'm a sophomore math major, and my schedule is unaffected.

The only cut that has roused the undergrads has been eliminating dinner service in freshman commons. Students wrote letters and donned T-shirts bemoaning the end of a great Yale tradition. Leisurely dinners in the wood-paneled dining hall have led to many lifelong friendships among Yalies.

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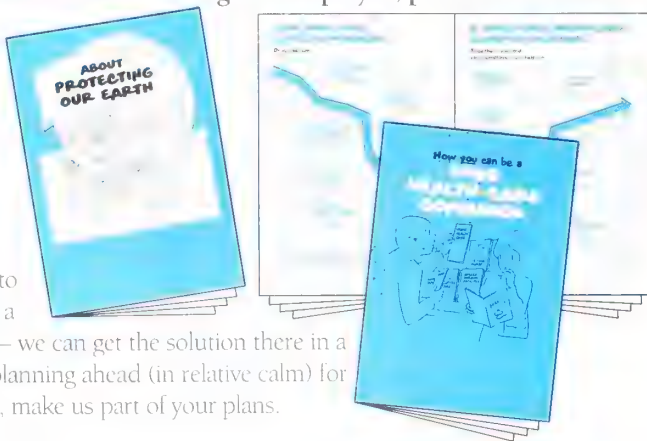


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flood of national headlines? After all, budget battles have disrupted campuses across the U.S., and undergrads here aren't occupying the president's office. The answer, of course, is that Yale is Yale, second only in recognition to the university we sometimes call "the school near Boston." And the spectacle of a fractious budget fight just doesn't jibe with Yale's lingering—but outdated—image as a bastion of Waspy blue bloods such as George Bush. Sure, old Blues still sing Boola Boola while drinking at their eating club, Mory's, but now about half the students depend on financial aid. We wear T-shirts, not ties. Women have been here for 20 years.

ANGRY PROFS. Still, even in the heat of the budget battle, there is an effort to retain some Ivy League gentility. The faculty seems to presume that here, if nowhere else, a certain code of gentlemanly conduct remains in force. As Eric V. Denardo, chairman of the doomed operations research department, said to a packed faculty meeting: "This administration has violated Yale's tradition of reciprocal trust and good faith."

The faculty charges that the administration has been sneaky, not sharing developments with colleagues. Naturally, professors in the departments targeted for the deepest cuts are the angriest. Applied physics Chairman Werner P. Wolf epitomizes the faculty firebrands. Soon after the budget was released, he began attacking it and Provost Turner. As far as he's concerned, nothing's settled. "They made a proposal. I don't accept it," Wolf says in his booming voice.

If, as Wolf believes, Turner's recommendations will be significantly modified, the engineers and sociologists may have Donald M. Crothers to thank. The biochemistry professor has become the mild-mannered answer to Wolf, but his attacks sting nonetheless. "I believe we are suffering from an administrative bloat," he charges. "It's very hard for an administration to acknowledge that it's part of the problem."

It's hardly a surprise that no one is willing to volunteer for financial sacrifices. The candidates offered up, buildings and the endowment, can't speak in their own defense. Meanwhile, with their review committees, the professors hope they have created enough bureaucratic sludge to delay the plan and maybe ever alter it.

So if you're looking for a nice, insular world where everything is *lux et veritas*... well, New Haven still has some excellent, cozy little pizza joints.

DAVID LEONHARDT

Leonhardt, a former *BUSINESS WEEK* intern, doesn't know the words to Boola Boola.



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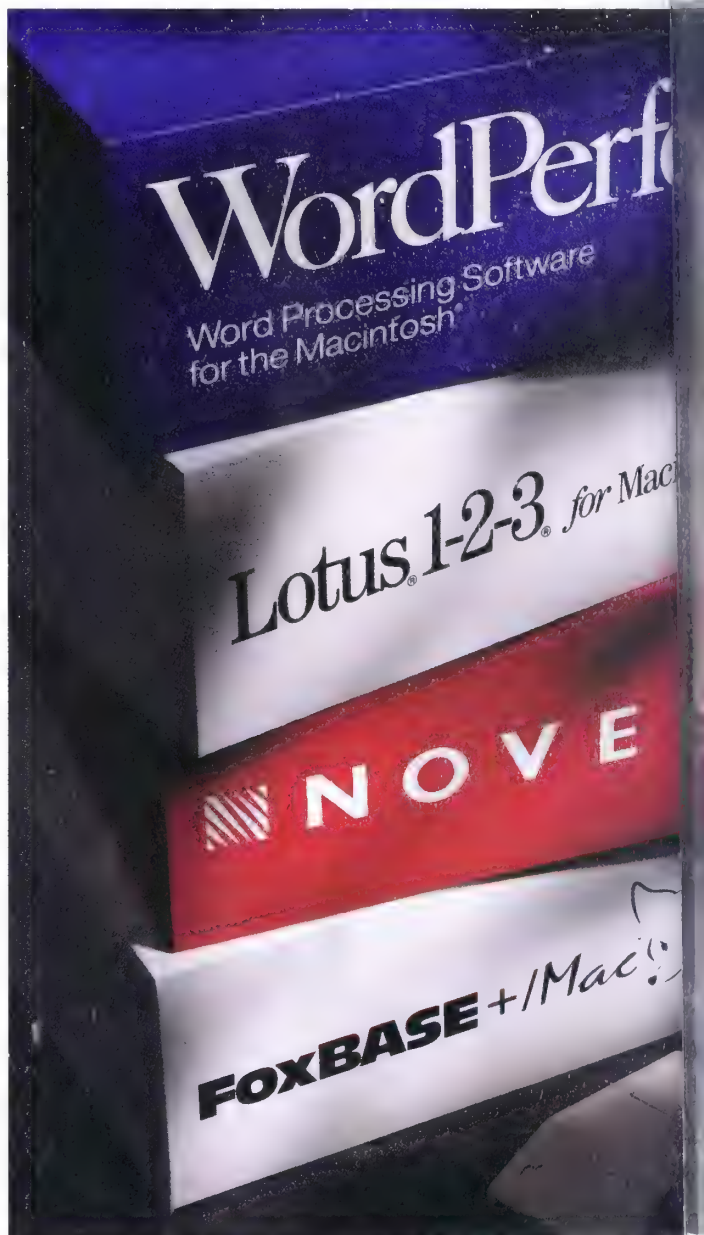
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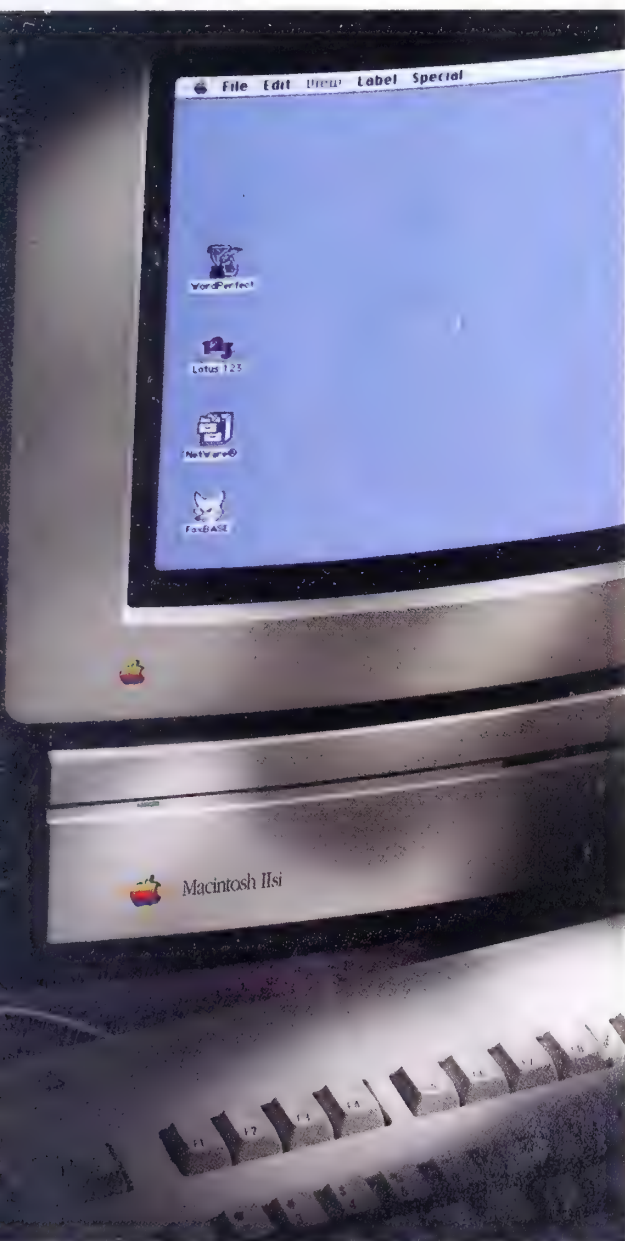
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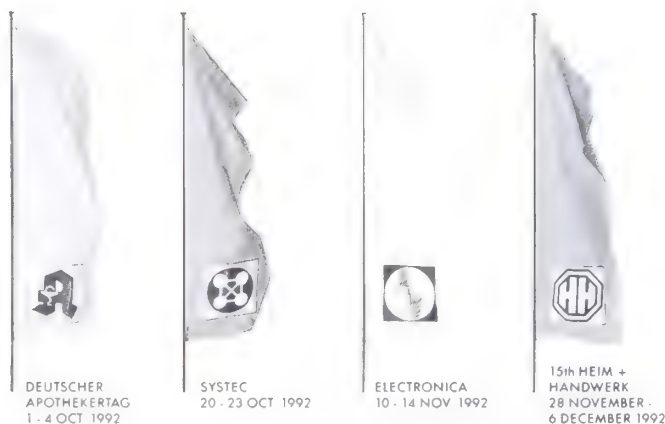
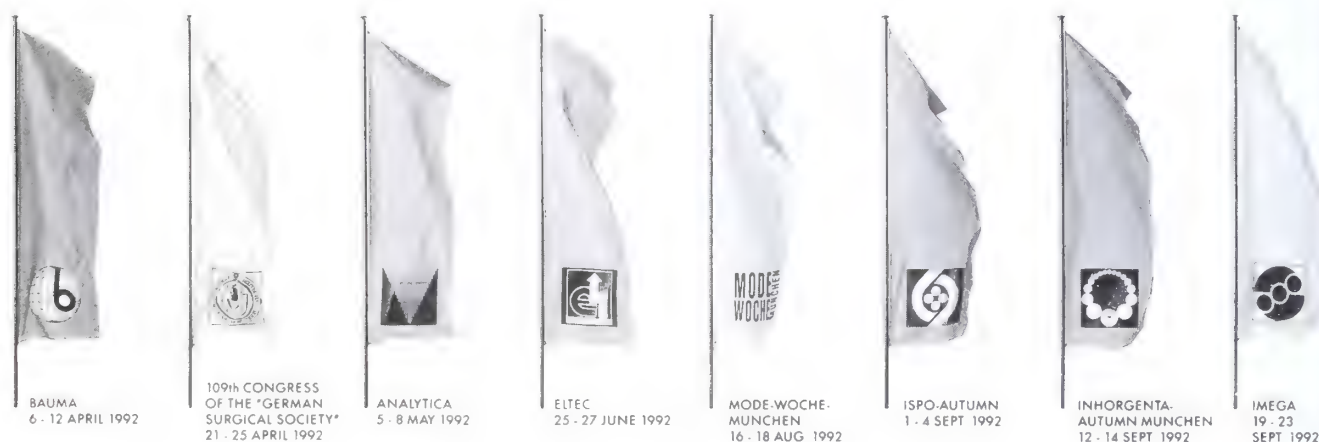
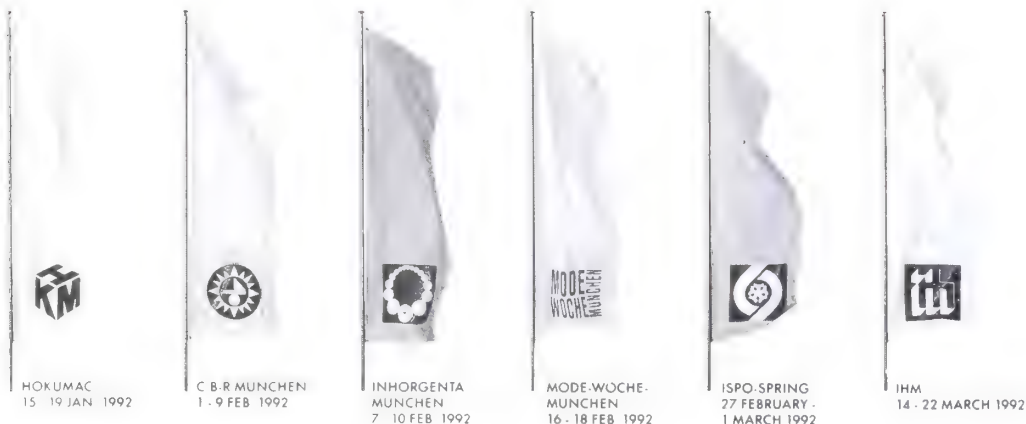
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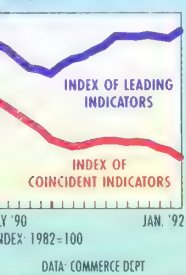
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CROSS YOUR FINGERS, KNOCK WOOD: THAT MAY BE A RECOVERY OUT THERE

The flurry of upbeat data in January and February contains hopeful signs that faster growth lies ahead. It shows that consumers aren't acting as depressed as they say they feel, housing is responding to lower financing costs, car sales are a little stronger, and the industrial sector appears to be regaining some of the momentum it had lost.

But these signs are far from conclusive. Growth in the current quarter is shaping up to be a carbon copy of the fourth quarter's lackluster performance, and the crucial reports to a quickening of business activity—faster growth in employment and household incomes—have not yet fallen into place. Slowly but surely, lower interest rates will bring this zombie of an economy back to life, but the key word here is “slowly.”

ECONOMY: WEAK NOW, STRONGER LATER?



sandwiched between two recessions.

More important, the past three years have seen sharp slowdowns in the growth of payroll jobs and household incomes that have squashed the three-year growth rate of consumer spending down to an annual pace of only 0.8%. The point here is that consumers hold the key to faster growth, but reversing the growth trends in jobs, incomes, and spending—in the face of burdensome layoffs, corporate restructurings, and a cautious Federal Reserve—will not come easily or quickly.

LEADING INDICES POINT NORTH

A couple of government indexes sum up the economy's story. The index of coincident indicators—those that track the economy's current path—dropped steeply in January, reflecting the first quarter's shaky start. However, the January index of leading economic indicators—those that point to future growth—posted a strong gain, suggesting better times ahead (chart).

The leading index rose 0.9% after posting small declines in three of the past four months. Seven of the 11 indicators that comprise the leading index contributed to the increase. Higher stock prices, more building permits,

and gains in new orders for both capital equipment and consumer goods accounted for most of the advance. In contrast, the coincident index dropped 1% in January, to the lowest level in 4½ years.

One immediate problem is excessive inventories held by retailers and wholesalers last quarter that are depressing output this quarter. The Commerce Dept. says real GDP rose at an annual rate of 0.8% in the fourth quarter, instead of 0.3% as reported a month ago. However, faster inventory growth fueled the upward revision, while overall spending was revised down.

Nonfarm inventories rose by \$12.5 billion last quarter—far greater than the \$3.6 billion increase initially reported. The breakdown shows that manufacturing stockpiles actually fell by \$9.9 billion, but retail and wholesale inventories jumped by \$23.7 billion (chart). The pile-up of nondurable retail goods was especially large.

With retailers and wholesalers awash in a sea of inventories, ordering to factories has fallen off, and manufacturers are trimming their own stock levels. Factory inventories fell 0.3% in January—the fourth consecutive drop. That's why industrial production declined in November, December, and January. Without a faster pace of consumer spending to help lighten inventories, more output cuts will be necessary.

WHERE INVENTORIES ARE EXCESSIVE



DETROIT SPEEDS UP JUST A BIT

The February report from the National Association of Purchasing Management suggests that the recent weakness in manufacturing may be bottoming out. The purchasing managers' composite index of industrial activity rose to 52.4% last month, from 47.4% in January. A reading greater than 50% means that manufacturing is growing. The NAPM's readings of production and new orders both rose smartly in February.

But it's still not clear if those gains are broad or sustainable. Auto production was probably the biggest boost for February output. Carmakers cut their January production to an annual rate of 5 million from 5.6 million in December. That took a big bite out of industrial output in January, but based on Detroit's February schedule, car production bounced back to 5.6 million.

Beyond autos, the factory outlook is less cheerful. Factory orders in January rose 0.4% from December, but a 1.4% drop in bookings for nondurable goods offset the

Business Outlook

month's 2.2% gain in orders for durable goods. That was the second consecutive decline in nondurable orders—a result of the inventory overhang at retailers.

For manufacturers of nondurable goods, the ratio of inventories to sales rose sharply in December and January. That suggests more production cuts in that sector.

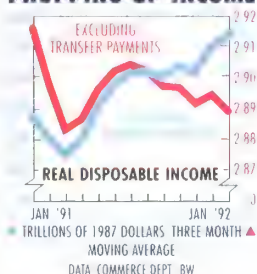
NEW HOMES FOUND NEW OWNERS

Consumers weren't eager to spend in January, and unless incomes begin to rise faster, households will not be able to supply the thrust that the economy needs.

Real consumer spending for goods and services, adjusted for inflation, rose a mere 0.1% in January.

Services accounted for all of the month's slim gain, while outlays for goods were unchanged. Purchases of goods had declined at an annual rate of 4% in the fourth quarter, and no gain in January means that retailers and wholesalers didn't make much progress toward cutting their bulging inventories down to size.

TRANSFERS ARE PROPPING UP INCOME



Initial readings for February show that consumers did step up their car buying, but only a bit. Sales of domestically made cars rose to an annual rate of 6.2 million in February, from 5.9 million in January. But that's still a subdued pace. Until car sales rise back to the 7 million rate, doubts will remain about the general readiness of consumers to lead an upturn.

To do that, consumers need more income. Personal income dipped 0.1% in January after a big gain in December that was fueled by onetime factors. After inflation and taxes, real income has grown at an annual rate of 1.7% since October. That pace is an improvement over previous months, but it won't support much spending.

Moreover, without a lift from transfer payments—

income from Social Security and various income-support programs—real incomes have been trending down in recent months (chart). From September to January, over all real income has risen by slightly more than \$18 billion. Excluding transfers, real income has fallen by just under \$18 billion. Growth in the important wages and-salaries component of income has been about flat reflecting poor job growth.

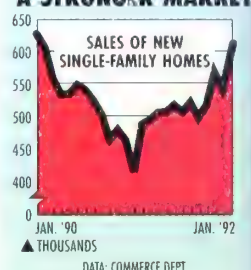
Although sluggish income growth is keeping a lid on everyday consumer spending, that hasn't deterred some consumers from taking advantage of the lowest mortgage rates in more than a decade. Sales of new single family homes jumped 12.9% in January, to an annual rate of 612,000—the highest level in two years (chart).

Curiously, sales of existing homes dipped slightly in January, to a 3.2 million annual rate. But the logjam in mortgage applications during the month may have pushed many closing dates into February.

A more serious problem for the housing recovery is the recent backup in interest rates. The average rate on 30-year mortgages in late February had risen to nearly 9% from a 17-year low of 8.3% in mid-January. The Mortgage Bankers Assn.'s index of mortgage applications for home purchase had more than doubled from December to late January. But by late February, the index had dropped by 25%. That may be signaling a sales slowdown in February.

Ultimately, consumers will have to see job-market conditions and income prospects improve substantially before a meaningful economic recovery can take root. Right now, many sectors are improving bit by bit. But by summer, a little here and a little there might just add up to the real thing.

HOMEBUILDERS SEE A STRONGER MARKET



THE WEEK AHEAD

RETAIL SALES

Thursday, Mar. 12, 8:30 a.m.

Retail sales in February are expected to have risen by 0.5%, according to the median projection of the economists surveyed by MMS International. Sales had increased by 0.6% in January—the largest increase in eight months. Reports from retailers that sales continued to improve in February, plus a modest uptick in car buying in the month, suggest the rise. The economists expect retail sales, excluding autos, to post a smaller gain of 0.3%. The housing recovery likely lifted purchases of home-related goods, and a price-induced rise in gasoline outlays added some strength. Even if the economists' projection is right, the

real volume of sales—adjusted for price increases—will still be below its fourth-quarter average.

PRODUCER PRICE INDEX

Friday, Mar. 13, 8:30 a.m.

The MMS consensus expects the February producer price index for finished goods to show a gain of 0.2%. That would follow a 0.3% decline in January. Higher prices for energy and food were not a factor in February, say the economists. Excluding those two volatile categories, the core PPI is also expected to increase 0.2%, and prices of intermediate and crude goods should remain tame. If the projection is right, PPI inflation during the past year will be only 0.4%, and the core PPI will be up only 2.4%.

BUSINESS INVENTORIES

Friday, Mar. 13, 10 a.m.

Inventories held by manufacturers, wholesalers, and retailers probably fell by about 0.2% in January. Manufacturers have already reported a 0.3% cut in their stockpiles for the month. Factory inventories were brought down by the combination of a 1% drop in manufacturing output and a 0.1% rise in factory shipments. A pickup in January retail sales probably helped retailers reduce their stock levels a bit as well. Overall business sales in January probably rose by about 0.3%. Inventory-cutting in the first quarter will result in a subtraction from the quarter's growth in real gross domestic product.

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BUMMED-OUT IN AMERICA

WHY DO CONSUMERS FEEL SO BADLY—AND WHAT WILL SNAP THEM OUT OF IT?

America's most widespread psychological malady today may be an acute case of economic funk. By most measures, Americans are as depressed about the economy as they've been in recent memory. The Conference Board's monthly index of consumer confidence—which measures how buyers feel about the economy and its prospects—recently dipped to 46.3, its lowest level since December, 1974 (chart). In the past five months, consumer confidence has plunged by fully one-third.

Consumer blues could be terrible news for a U.S. economy struggling to pull out of recession. The danger? Consumer spending makes up two-thirds of the nation's gross domestic product, and a depressed consumer is less likely to pull out his wallet. "It's hard to imagine how the economy could recover with consumers remaining this depressed," says Edward Yardeni, chief economist at brokerage house C. J. Lawrence Inc.

Just why are Americans so blue, even as solid signs of economic recovery appear? New-home sales have risen, factories are cranking up, and lower interest rates are easing debt service for millions. But until the average Joe sees sustained evidence of these gains, he'll measure his mood by different yardsticks: a cousin's recent layoff, measly 4% rates on bank certificates, the neighbors' house that's listed for 20% less than it sold for three years ago, President Bush's floundering reelection campaign, and Japanese sniping at American work habits.

BIG CHILL. Even if the economy turns up by spring, that may not be enough to restore the high levels of confidence that most folks held before the recession. Indeed, the deep-seated pessimism may not completely lift until the country sets about making fundamental changes. "It's one thing if you believe growth will resume and your children will be better off than you are," says Henry J. Aaron,

an economist at the Brookings Institution. "No one feels that way anymore."

In part, the problem is simply that the recession is wearing on longer than most anyone expected. To many Americans, the downturn's big chilling effect has been to put their jobs in jeopardy—either in reality or in some fearful imagining. Joblessness keeps rising, most recently to 7.1% in January. More telling to job hunters is the dearth of employment ads: The Conference Board's Help-Wanted Advertising Index, which tracks newspapers across the nation, fell in January to its lowest point since 1983.

And if workers don't come home from the office worried about their jobs, they

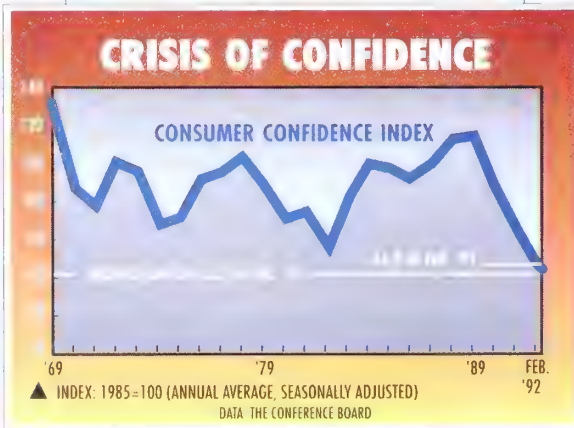
getting a pink slip feel a lot poorer. Fully 62% of consumers say their after-tax income is down from six months ago, according to recent surveys by market researcher Sindlinger & Co. Once again, they're probably right: Per capita income, adjusted for inflation, has stagnated since 1986, and real hourly compensation in manufacturing actually fell in every year but one.

Compounding the worries about jobs and wages is the real estate slump. Beneath the cocktail-party chatter about who got a great deal on a six-bedroom Victorian fixer-upper, Americans seem to have been stunned into a persistent dismay about the collapse in housing prices. Nationwide, the average sale price of a new home, adjusted for inflation, has fallen by nearly 8% since the end of 1987. In the hardest-hit areas, including California and New England, the slide in values was much steeper.

Far harder to track, but as important to the consumer psyche, is America's view of itself. And these days, consumers are suffering from a massive inferiority complex. Thanks to critical comments about U.S. workers by Japanese politicians, the chronically eroding market share of Detroit carmakers, the sale of U.S. assets

to foreigners, and the prospect of a tougher rival in a united Europe, Americans are discouraged about the country's competitive standing vs. the rest of the world. Indeed, despite the burst of "Buy American" spirit that followed the President's ill-fated January trip to Japan, Honda Motor Co. and Toyota Motor Corp. both expanded their share of the U.S. auto market that month. The irony of it? Overseas, American goods are doing just fine, thank you. The U.S. trade deficit, at \$74 billion, last year closed to its narrowest gap in eight years.

Plainly aggravating consumers' crisis of confidence is a sinking feeling that U.S. leaders aren't up to the task of



get a reminder many evenings on the tube: In recent weeks, for instance, the TV news, newspapers, and magazines have all seemed filled with reports of contractions and layoffs at such once-invincible companies as IBM and General Motors Corp. The headlines and hype often ignored the fact that the two companies were simply providing further details of more general announcements issued late last year. Little wonder, then, that Leo J. Shapiro & Associates, a Chicago researcher, found nearly half of all Americans expect that they or someone in their household will be laid off or face a cut in work hours next year.

Even some who aren't in danger of



etifying what's wrong. As Congress in recent weeks debated how to jump-start the economy with this tax cut or that, it came plain that there were few even in Capitol Hill who believed the measures were designed to do much more than embarrass leaders of the rival party. By the time the House bill reached the floor, it won passage by a bare handful of votes. No wonder the insurgent presidential campaigns of Republican Patrick J. Buchanan and Democrat Paul Tsongas have, against all odds, caught fire.

An annual poll by Louis Harris & Associates shows that Americans hold a stunningly low level of confidence in

their institutions—a trend that began way back with the Vietnam War. But in the roaring 1980s, it hardly mattered, as consumer confidence soared: In 1989, the Conference Board's index stood at 116.8, its highest level since 1969.

'PRETTY UPSET.' Today's outlook is clouded by the crushed expectations of middle-aged Americans. The baby-boom generation in particular is suffering from a big drop in confidence, reports Plog Research Inc. of California. "A lot of baby boomers are pretty upset about how things worked out for them," says Yardeni. This broad swath of consumers grew up in a world where economic insecurity was Mom and Dad's hangup, buy-

ing a house was a prudent investment, and a white-collar job was a ticket to prosperity. Funny thing about expectations: Like rules, so often they seem made to be dashed.

What's going to turn things around? Fewer layoffs, more hiring, higher real incomes would all do a lot to push consumers out of their blue funk. Signs of an economic recovery are sprouting (page 31). But it's unlikely that consumers will adopt anew their swagger of the 1980s. That would require a commodity that's even scarcer than confidence right now: hopefulness.

By Michael J. Mandel with Christopher Farrell in New York



★ CLINTON: PICKING UP STEAM IN THE SOUTH



★ BUSH IN GEORGIA: THE VICTORY WAS FAR FROM SWEET

A BLOODIED BUSH VS. A SOUTHERN STRONGMAN?

The Republican race seems over—and Clinton may clinch by Mar. 17



la Patrick J. Buchanan looks sure to sap a third of the vote in every contest from a more and more hapless George Bush. And the seven states that held Democratic caucuses and primaries on Mar. 3 produced four different winners.

But things are clearer than they seem. As the race heads toward the Southern battlegrounds where the crucial contests of "Super Tuesday" on Mar. 10 will be fought, the Republican contest is over. Buchanan may leave Bush with wounds that will bleed all the way to November, but he can't stop the President's renomination. Meanwhile, Arkansas Governor Bill Clinton has emerged as the clear Democratic front-runner, even though former Massachusetts Senator Paul E. Tsongas' Maryland victory made him the first hopeful to win a primary outside his home region.

At first glance, the race for the Presidency looks like a monstrous muddle after the first three weeks of primaries. Republican guerril-

The outcome of contests in the industrial heartland of Michigan and Illinois on Mar. 17 could well clinch the nomination for Clinton.

That's not to say that there won't be bumps along the way. Clinton seems to have put allegations of extramarital affairs and draft-dodging behind him. But the scandals have left him doubly vulnerable: Any fresh revelations would blow him out of the race.

Still, Mar. 10 is when Clinton's meticulously organized campaign finally pays off. The Arkansas governor is heavily

favored in Texas and five other Southern states. He should come away from Super Tuesday with a rich haul of delegates—and tremendous momentum as the campaign moves north. "Tsongas' campaign depends on momentum, and he won't get it" in the South, says University of South Carolina political scientist Earl Black.

MAGNOLIA LINE. On the Republican side, the "Junior Tuesday" victories were far from sweet for Bush. Buchanan stole 36% of the vote in the Georgia primary and scored a respectable 30% showing in Colorado and Maryland, states where he hardly campaigned. But he has won only 20 delegates to Bush's 340 because of the winner-take-all rules of many GOP primaries. Now, his campaign heads into Bush country—the President's adopted home state of Texas, and a "magnolia line" of Deep South states that gave Bush strong support in 1988.

If Buchanan is to turn his candidacy into more than a right-wing temper tantrum, he needs an outright win—and fast. Party operatives will soon turn up the heat on Buchanan to quit the race or risk ceding the White House to the Democrats. So far, Buchanan seems unimpressed. On Mar. 4, he called on Bush to drop out of the race.

Even if Buchanan were to quit soon, he has already done the President grave harm. Privately, Bush political advisers now concede they vastly underestimated voter alienation. "Buchanan has seized that 36% core of Ronald Rea-

THE CRUCIAL CONTESTS COMING UP

State	Date	Democratic delegates*	GOP delegates**
TEXAS	MAR. 10	196	121
Super Tuesday's grand prize. Like Georgia, Texas is Clinton's to win or lose. Bush counts on winning big in one of his home states			
FLORIDA	MAR. 10	148	97
A key test for Democrats. Upscale Floridians like Tsongas, blacks and the elderly like Clinton. Bush should hold his own			
MICHIGAN	MAR. 17	131	72
Sick economy makes Michigan worth watching. Buchanan angling for another Bush-whack			
ILLINOIS	MAR. 17	164	85
Clinton is well-organized, but Tsongas is coming on. And look out, Mr. President: Buchanan may capture blue-collar Chicagoans			

*Needed to nominate: 2,142

**Needed to nominate: 1,104

DATA BW

supporters in our party who never d George Bush to begin with," says senior GOP adviser.

The biggest success the pugnacious hanan has had so far is in pushing h into a state of high pander. The ident offered an astonishing mea a on Mar. 3, saying that his 1990 raising budget deal with Democrats "a mistake." That admission was the latest in a lengthening string of h flip-flops and political miscues.

OF PRINCIPLE. Indeed, as the Presi- tries to recapture GOP conserva- , Administration policy decisions n more and more to be driven by ical panic. On Mar. 4, as the cam- n shifted to Texas, Bush suddenly rsed a proposed tax break for inde- nt oil and gas producers. Such ad- swings could well backfire, as both hanan and the Democrats charge t the President lacks principles. "Bush doesn't stand for anything," says enior Reagan White House aide. "at's coming across to people."

You would think the GOP chaos would e Democrats honing their axes for fall slaughter. But the contest for Democratic nomination has become a ously joyless slugfest. True, the in- singly marginal Senator Bob Kerrey ebraska may soon bow out, and Sen- Tom Harkin of Iowa may follow e behind. But former California Gov- or Jerry Brown's surprise victory in rado means he'll be able to stay in race.

uper Tuesday offers Clinton the ace to break out far ahead. The con- s in seven Southern and border es will choose 633 delegates, almost third of the total needed for the ination. With 254 delegates in hand, buoyed by a bigger-than-anticipated 24% Georgia victory over Tsongas, ton is now coming on as the South- Superman. He is sharpening his at- s on Tsongas and redefining himself populist, while painting his rival as ickle-down Republican in disguise.

Tsongas, with 119 delegates, could surprise Clinton in Florida. He ap- s to subplanted Northerners and cale suburbanites, while Clinton rts blacks, labor, and the elderly. s Mason-Dixon Research Inc. pollster Bradford Coker: "Florida will come n to class warfare between Clinton Tsongas."

That's a battle Democrats usually e against Republicans. It will take ore weeks for Democrats to sort the field. But with George Bush ing more and more like Gerald Ford, emocratic governor with a Southern nt may have a certain appeal.

Douglas Harbrecht and Paula Dwyer in hington, with Gail DeGeorge in Miami Richard S. Dunham in San Antonio

CRYING 'JOBS' TO SELL WEAPONS ABROAD

McDonnell says a Saudi F-15 deal would keep 40,000 working

McDonnell Douglas Corp. once took a "What, me worry?" attitude about what would happen after the Air Force's last F-15 fighter rolled off the St. Louis assembly line in 1994. By then, planners figured, the plant would be busy building new A-12 attack planes for the Navy. But when the Pentagon canceled the A-12 a year ago because of cost overruns, McDonnell suddenly needed new business fast. Saudi Arabia's request to buy 72 F-15s seemed like the answer. But jitters in Washington about massive arms sales to the Middle East kept the deal on hold.

Now, McDonnell is mounting a vigor-

McDonnell and reward an ally by going ahead with the Saudi sale. But with an election looming, arms-control talks under way, and negotiations over housing loan guarantees for Israel at a delicate stage, the Bush Administration prefers to avoid the controversy.

To force a decision, McDonnell lobbyists in Washington are stressing "jobs, jobs, jobs." To build the F-15, McDonnell depends on 2,100 subcontractors employing 33,000 people. Although not all of these workers make F-15 components, a McDonnell spokesman says the Saudi sale is "a surefire way to protect the jobs of 40,000 people."

Advocates also argue that the ripples of an F-15 sale to Saudi Arabia could affect aerospace deals for years. Riyadh will soon need to replace 100 aging F-5 fighters, and it is shopping for commercial airliners. A likely U.S. successor to the F-5 would be General Dynamics Corp.'s F-16 fighter or McDonnell's F/A-18. Boeing Co., which made 40 of the 69 airliners in the Saudi fleet, also wants more business.

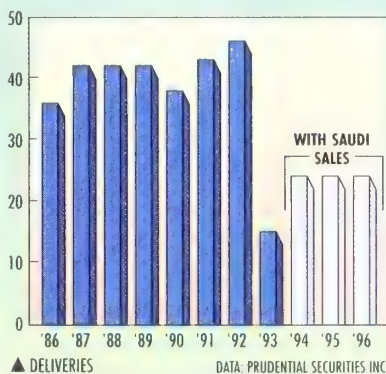
But if the Bush Administration makes the Saudis wait too long for F-15s, McDonnell warns, Riyadh may buy European instead. In 1985, after Washington turned down an earlier request for F-15s under Israeli pressure, Saudi Arabia signed an \$8.7 billion deal with Britain that included 72 Tornado fighters and 30 Hawk jet trainers. Now, Britain is offering to sell Riyadh 48 more Tornados.

MAJOR BATTLE. Many on the Hill are unimpressed by these arguments. They're worried that the Saudis want to buy 48 F-15Es, an advanced ground-attack version of the plane that the U.S. has never sold abroad. "The threat doesn't warrant the kind of sale," being contemplated, says Representative Benjamin A. Gilman (R-N.Y.). If the Israeli loan guarantee talks collapse, says a Senate Foreign Relations Committee staffer, "the Administration will face a major battle with Congress over the sale."

But McDonnell likely will prevail. With the economy in an election-year slump, "the jobs issue will be decisive" with many members, says Representative Lee A. Hamilton (D-Ind.). And if the sale goes through, watch for more arms makers to use jobs as a weapon to beat down foreign policy concerns over sales.

By Amy Borrus in Washington, with James E. Ellis in Chicago

LAST CHANCE FOR THE F-15



ous lobbying effort for the Saudi sale. The \$5 billion order would keep production humming into 1997. Without it, about 3,000 of the company's 7,000 F-15 employees will run out of work this year. Besides, McDonnell needs the business. Despite cost-cutting that averted a debt crisis and spawned 1991 record earnings of \$423 million on sales of \$18.4 billion, most of the company's military aircraft programs are winding down. And with Taiwan balking at a pending \$2 billion investment in McDonnell's commercial business, the company needs cash for a planned MD-12 widebody.

FOREIGN PUSH. McDonnell's plight underscores the pressure on U.S. defense contractors to sell abroad. Squeezed by budget cuts, the Pentagon is canceling orders for a slew of current-generation tanks, planes—even vaunted Patriot missiles. To keep production lines rolling and workers employed, U.S. manufacturers are pushing foreign sales more aggressively than ever.

The Pentagon would like to help out



KEATING'S COUNSEL FISHBEIN: LOYALTY TO THE STATE VS. LOYALTY TO THE CLIENT?

'SOMEBODY HAS TO PAY'— AND THAT MEANS S&L LAWYERS, TOO

Regulators tackle the legal teams that ran interference for the thrifts

In his heyday, convicted savings and loan kingpin Charles H. Keating Jr. deployed battalions of well-paid lawyers to blunt the regulatory assault on his high-flying California-based thrift, Lincoln Savings & Loan Assn. In the three years since Lincoln's \$2.6 billion failure, many of those advisers have been sued for alleged misdeeds.

But on Mar. 2, the feds sent out their strongest signal yet that it's payback time. Thrift regulators ordered the prestigious New York law firm of Kaye, Scholer, Fierman, Hays & Handler to pay an unprecedented \$275 million in damages for allegedly misleading regulators about the true state of Lincoln's finances. They also sought to freeze the firm's assets and bar it from practicing banking law. The firm, which took in \$13 million for representing Keating, denies the charges and promises a vigorous defense. "It's pure vindictiveness," says one Kaye Scholer insider.

'STRIKING BACK.' The move is part of a sprint to the finish for the government. Banking regulators, racing against a three-year statute of limitations in the 1989 thrift-bailout law, are pursuing cases against a dozen or more law firms that assisted now-failed thrifts (table). Lawyers also

face attacks from state officials. Says Miami lawyer Thomas Tew: "Regulators are tired of being embarrassed, and they're striking back."

The Office of Thrift Supervision (OTS) case against Kaye Scholer and managing partner Peter M. Fishbein attacks the very way lawyers represent clients before regulatory bodies. The government accuses the firm of breaching its professional duties in the mid-1980s by keeping mum about Lincoln's problems. The firm also failed to disclose that Lincoln's auditors had resigned out of concern over the thrift's fiscal health, the regulators charge. And they contend that Kaye Scholer neglected its obligations to Lincoln's board and had a con-

flict of interest in representing both Lincoln and its parent, American Continental Corp. in Phoenix.

Some legal experts say that if the government's claims hold up in court, the will revolutionize the attorney-client relationship, forcing lawyers to put loyalty to the state above loyalty to clients. "Lawyers have a duty of strict confidentiality to their clients," says Henry A. Kelly, a former head of the American Bar Assn.'s panel on lawyers' liability. Gary G. Lynch, a former Securities & Exchange Commission enforcement chief who is defending Kaye Scholer, says the government's position "would fundamentally undermine traditional lawyer responsibilities to clients."

SCAPEGOATED? That argument doesn't impress regulators, who are under enormous pressure to win scalps. With the thrift fiasco's tab now exceeding \$15 billion, it's clear the search to fix blame for S&L excesses will continue. "At the government level, they're saying: 'Somebody has to pay,'" says the Reverend Robert F. Drinan, an expert on legal ethics at Georgetown University.

Some lawyers have already paid for their ties to Keating, who has been convicted of state tax-fraud charges and is now fighting federal fraud charges. Last year, Chicago's Sidley & Austin agreed to pay \$7.5 million to settle malpractice charges. The firm gained notoriety when a 1988 memo written to Keating by Washington partner Margery Waxman became public. Waxman had boasted of putting regulators on the defensive. "You have [them] right where you want them," she wrote. She later told a Senate panel that her comments were hyperbole designed to impress her client.

Now, however, regulators think they have the lawyers where they want them. Kaye Scholer was ready to settle with other thrift regulators for roughly \$20 million, say sources close to the firm, but the OTS wanted even more. That puts Kaye Scholer in a tight bind: It may

prefer to defend the attorney-client principle, but if its assets are frozen and future business is imperiled, it may have to settle.

The legislators who wrote the 1989 bailout law acted not only to clear the wreckage of the thrift industry but also to punish those who did the damage. The action against Kaye Scholer is a clear sign that the feds' latest roundup may rope in other law firms.

By Tim Smart in Washington, with Gail DeGeorge in Miami and Michele Galen in New York

THRIFT LAWYERS UNDER FIRE

**JONES, DAY, REAVIS
& POGUE
CLEVELAND**

The firm is fighting a \$50 million suit by regulators over its work for Lincoln Savings & Loan

**DORSEY & WHITNEY
MINNEAPOLIS**

The government is suing it and others for \$192 million over the failure of Midwest Federal Savings & Loan

**SHERMAN & HOWARD
DENVER**

The firm agreed in June, 1991, to pay some \$20 million to settle a federal suit over work for Silverado Savings & Loan

**SIDLEY & AUSTIN
CHICAGO**

The firm, which represented Lincoln, has paid millions to settle cases filed by the government and bondholders

DATA BW

KEEPING A SHARPER EYE ON THOSE WHO PASS THE HAT

Few slogans are as familiar to Americans as "Give the United Way." But these days, the pioneer of the workplace-based charity campaign is looking like a victim of its own success. On Feb. 28, allegations of lavish spending and mismanagement forced longtime United Way of America President William Aramony to resign. While the misconduct may turn out to be limited to Aramony personally, the affair has thrown a harsh spotlight on this venerable charity—and sparked questions about its cozy monopoly on corporate workplace drives.

At the least, United Way's problems have indicated some serious lapses in accountability. The indiscretions "should have been detected far earlier," complains Stanley C. Gault, chairman of Goodyear Tire & Rubber Co. "Where was the board? The outside auditors?" Already, the United Way of Tristate, which coordinates fund-raising for 35 United Ways in New York, New Jersey, and Connecticut, has seen an abrupt halt to pledges at six campaigns, says President Betty Beene. About a dozen new drives, scheduled to start this month, have been postponed. "It taps into people's worst fears about charity's abuses," says Kalman Stein, executive director of Washington-based Earthshare, an umbrella organization for 43 environmental groups. Some nonprofit executives worry that the controversy could even lead companies to discontinue workplace campaigns altogether.

MAINSTREAM CAUSES. Dropping office drives would be a mistake, however. Such campaigns relieve corporations from having to deal with thousands of solicitations. Most of all, federated giving provides an efficient way for charities to raise a lot of money with relatively little overhead. Nevertheless, the crisis at United Way should force both the group and employers to look beyond what's the easiest way to make donations, to what's the best way.

The modern United Way has its roots in the local Community Chests of the 1920s. They evolved into the united- and movement, which adapted the

payroll-deductions system from war-bond drives. In the ensuing years, United Way thrived partly because it had little competition and partly because it was shrewd enough to invite the business community into its affairs: Sitting on a United Way board is considered a status symbol among CEOs. The mainstream nature of its causes—the YMCA, American Red Cross, and the Boy Scouts are typical recipients—also helped its popularity.



But as the number of competing federations has grown, so have complaints about United Way's lock on payroll deductions. And as the world has changed, so too have the social issues, such as the environment and women's rights, that appeal to employees. There's solid evidence that diversifying workplace campaigns can work: These days, about 10% of charitable payroll deductions go to non-United Way funds, vs. 3.5% in 1980, according to Washington-based National Committee for Responsive Philanthropy.

Should Corporate
America promote employee
payroll deductions
for charities?

At American Telephone & Telegraph Co., for instance, employees in the New York metropolitan area can use payroll deductions for United Way or regional Black United Funds, another federated campaign. In Boston, Polaroid Corp. and Lotus Development Corp. allow workers to donate to Community Works, which supports groups such as the Boston Women's Health Book Collective and the Gay & Lesbian Advocates & Defenders.

Similarly, Ecolab Inc., a chemical maker in St. Paul, Minn., eliminated its United Way-only policy in the early 1980s to help charities whose budgets shrank when the Reagan Administration began cutting funds to nonprofits. Employees can make payroll contributions to the Cooperating Fund Drive, a group of 34 small nonprofits in areas such as housing rehabilitation and crime prevention, and to the United Arts Council.

HEAVY BURDEN. The United Way scandal should also encourage local United Ways and their donors to review fund-raising campaigns. Although reports of improprieties at the locals are rare, corporate board members may want to investigate accounting procedures and perks. Companies should

also examine the way the local handles its donor-choice program, which allows employees to designate a non-United Way charity. Too often, critics contend, the pledge forms are vague, rarely providing lists of unaffiliated charities.

And almost everyone agrees that corporations that permit these charity drives should eliminate the much-resented arm-twisting. United Way of Tristate is discontinuing awards to campaign managers for 100% employee participation. Admits Beene: "If participation is 100%, it means someone has been coerced."

If there is a time when charitable organizations need help, it's now: Government cuts and rising unemployment put a heavy burden on charities. The United Way scandal gives business the chance to enhance and improve, not eliminate, the concept that charity begins at the office.



LTV NOW FOCUSES ON SELLING HIGHER-PRICED SHEET STEEL TO AUTO AND APPLIANCE MAKERS

A BRAWL WITH LABOR COULD BLOCK LTV'S REBIRTH

The company sees a bright future—provided it gets union givebacks

Way back in 1986 when LTV Corp. filed for bankruptcy protection, the Dallas-based conglomerate told creditors it would rebuild around its high-flying aerospace and defense unit. Management hoped to kiss good-bye its deadbeat steel business, which made up 60% of LTV's 1986 sales but nearly all of its losses.

Instead, creditors agreed in February to a reorganization plan that would pay them stock in—of all things—a steel company. With revenues of \$3.7 billion and the industry's No. 3 rank, customers say the new LTV is a scrappy competitor. Meanwhile, the company's aerospace and defense operation is being sold for about \$500 million—roughly half its 1986 value. "When peace broke out, it had a negative effect on aerospace," says David H. Hoag, chairman of LTV. "The steel business is now in better shape."

'LABOR'S TURN.' Hoag hopes to exit Chapter 11 by yearend, ending one of the longest bankruptcies ever. But that hinges on whether the United Steelworkers will accept a concession-

ary contract. The union says it has done its part with a 1986 pay cut and a ten-year freeze in pension plan hikes.

This is no simple labor-management brawl. Wall Street is watching closely, because LTV's labor relations directly affect its value. LTV's stock, now trading at 80¢ a share, will be swapped after the reorganization for shares that investment bankers figure should open at between \$8 and \$15 each. Creditors say the stock will trade at the low end of the range unless concessions are used to offset LTV's \$3 billion pension bill.

Those are the same pension obligations that pushed LTV into bankruptcy in the first place. After a five-year battle, LTV agreed to begin repayment as it ex-

ited bankruptcy, starting with a \$1 billion payment, then \$50 million annually beginning in 1993, plus 50% of cash flow after capital spending. Now, LTV argues concessions are needed to cover the tab. "The creditors have all sacrificed, now it's labor's turn," says Wilbur L. Ross Jr. of Rothschild Inc., a financial adviser to LTV's unsecured creditors.

In December, LTV proposed a long list of givebacks, including eliminating wage increases for four years and requiring more retiree contributions to health benefits. "It's a damn insult," says John Sako, president of Local 1011 at LTV's Indiana Harbor works in East Chicago, Ind. "No way will we agree."

LTV may play rough to change the union's mind. Creditors say it may ask U.S. Bankruptcy Court Judge Burton R. Lifland to void the union's current contract with 12,500 workers and to impose lower wages until a deal is reached. The result would be a work stoppage. Says Jack Parton, USW district director in East Chicago: "It would be suicidal."

NO HIGHFLIER. No one knows that better than Hoag, 52, who has slashed LTV Steel Co. in half, to 9.8 million tons of annual capacity, while cutting its work force by 36%. He also pared back product lines to focus on higher-priced sheet steel, used by car and appliance makers (table). The results? LTV Steel "is our best steel supplier," says Stanley A. Zdeb, engineering director for Nissan Motor Manufacturing Co.'s Smyrna (Tenn.) plant.

Despite its progress, a reorganized LTV will be no highflier. There will be no aerospace to offset steel's profit swings, and sheet steel is tied closely to consumer markets. Indeed, LTV's steel unit posted an operating loss last year. Still, it's a loss of \$7 for each ton produced—one-fourth competitors' average.

Those competitors are multiplying fast: Low-cost minimills, including Nucor Corp., are set to enter the flat-rolled business. To stay ahead, LTV may lean on Japan's Sumitomo Metal Industries Ltd., a joint-venture partner. Sumitomo has agreed to put \$200 million into LTV.

But for now, LTV's labor crisis is the big risk. And resolving it rests with Hoag, who got the top job a year ago when LTV directors nudged former Chairman Raymond A. Hay into retirement. Hoag now has to prove he's too savvy a bargainer to let a labor dispute derail LTV.

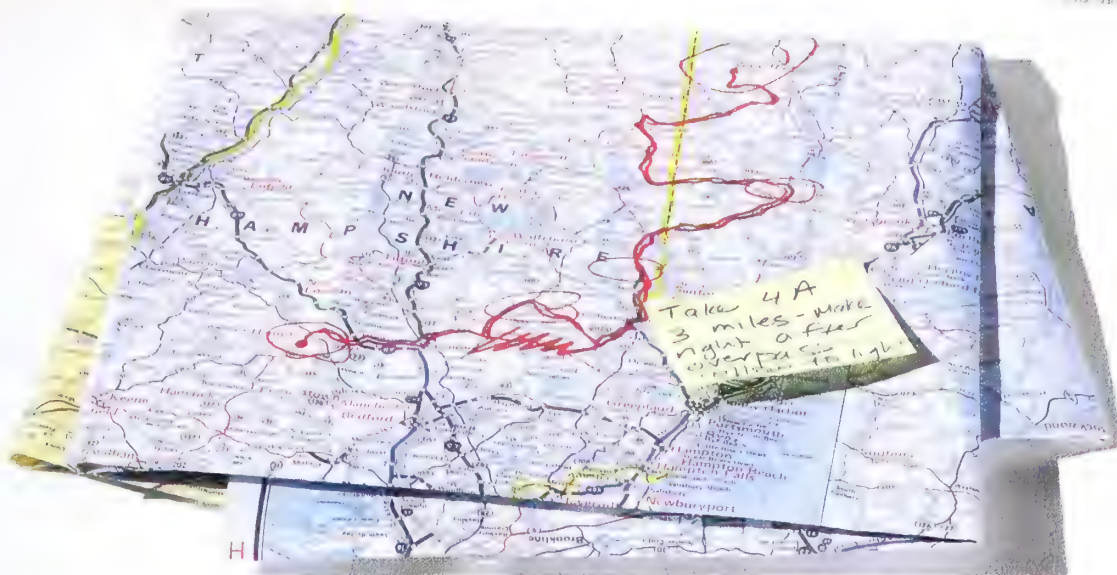
By Michael Schroeder in Pittsburgh, with Aaron Bernstein in New York

SMALLER AND SIMPLER

	LTV before bankruptcy 1986	Reorganized LTV 1991*
SALES	\$7.3 billion	\$3.7 billion
OPERATING LOSS	\$3 billion	\$218 million
MAJOR PRODUCT LINES	Flat-rolled, bar, and stainless steel, missiles, radar and guidance systems, military and commercial aircraft parts, Hummer utility military vehicles, oil drilling equipment	Flat-rolled carbon steel, oil drilling equipment

* Actual results, excluding defense and aerospace unit

DATA COMPANY REPORTS



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GOODYEAR IS GUNNING ITS MARKETING ENGINE

It's launching new lines, selling to Sears—anything to regain ground

Demanding bosses have a penchant for asking: What have you done for me lately? But Stanley C. Gault wants to know what Goodyear Tire & Rubber Co. has done for the customer lately. As Gault sees it, "we're not serving the market with what the customer wanted but what the manufacturing plants wanted to build." The former chairman of Rubbermaid Inc., regarded as a marketing guru, intends to remake Goodyear as a marketer, right down to ensuring that the lettering on racing tires doesn't smudge before the race has even started. Gault's goal: to recapture the market share lost by the flagship Goodyear brand.

On Mar. 3, Goodyear took its biggest step yet to regain lost ground, jolting its dealers by announcing that it would sell seven Goodyear-brand tire lines through Sears, Roebuck & Co. But that's only a part of the company's new marketing push. Some of Gault's moves are right out of the textbook: roll out new products, boost ad spending, widen channels of distribution. But the new team Gault named last October to oversee the company's North American tire unit is doing more. Instead of dictating a single selling approach from Akron, it's taking the business one market at a time.

That's quite a departure from Goodyear orthodoxy, but drastic measures were probably in order. Goodyear has seen the share of the U.S. replacement car-tire market held by its name brand fall from roughly 15% to 12% since 1987. **PRICEY IMAGE.** A big reason for the drop is that Goodyear simply wasn't putting its tires where shoppers would buy them. Increasingly, consumers are buying their tires at multibrand discount outlets as well as warehouse clubs (table). Alone among U.S. tiremakers, Goodyear has sold its brand almost exclusively through its own stores and independent dealers loyal to Goodyear. Those stores have a pricey image, says Gault, and potential customers who do come in encounter a selection that hasn't changed much lately.

Hooking up with Sears puts more Goodyear-brand tires where customers

roll by. Sears sells 9.5 million tires a year, more than any other retailer. Goodyear hopes to sell up to 2.5 million tires a year at Sears, which could erase half of the market-share loss.

Of course, that assumes that Goodyear won't lose any sales by its longtime dealers, some of whom are feeling slighted. "You feel like after 35 years of

restive, while the company's brand-name tires still aren't available in the fast-growing discount outlets. To fend off the low-priced competition, Goodyear has been testing its no-frills, quick-serve Just Tires stores. The tests have gone well enough in Memphis for the company to decide to open stores in Chicago and, probably, Boston. In another test, it has begun selling tires to a multibrand operator in Buffalo. Sales are up, although existing dealers are squawking that their margins have eroded.

SLICK AD. Another key element in Gault's strategy is launching new products. The headliner among Goodyear's new offerings is the Aquatred, introduced last fall as just the thing for rain-slick roads. Winter Olympics fans will recall the Aquatred ad—it featured computer-generated graphics of a tire turning from water to rubber. But even exciting consumer interest has its drawbacks: The company has to turn away business, since not all sizes are available yet.

Still, Gault believes it pays to advertise. So while he's slashing costs elsewhere, Goodyear will boost brand advertising by a third, to \$50 million, and increase the amount of money available for dealer ads. It's even repainting its famous blimps and will link them more directly to sales efforts, including the Sears tie. And Goodyear is moving to answer some dealer complaints. Dealers who have been clamoring for a low-priced Goodyear-branded tire are finally getting their wish. And they'll have more pricing flexibility with the middle-market S4S model.

Goodyear is still drumming up private-label business for its thriving Kelly-Springfield Tire Co. unit. Wal-Mart is a new customer. But John F. Fiedler, the former Kelly chief elevated by Gault to head the North American tire unit, notes that Goodyear has to sell more of its name-brand tires if it is to fund its research and development and advertising. "Who do you want to be," he asks, "the largest unknown company in the U.S.?"

Gault insists that the whole Goodyear family will prosper from the new marketing approach. Some dealers disagree. Yet whether they'll start selling rival brands remains to be seen. For its part, Goodyear is trying to keep them in the fold. For now, Sears won't get the Aquatred, nor will Goodyear ship its name-brand tires to Sears' discount stores. That may not assuage some, but Gault has his customers to consider.

By Zachary Schiller in Chicago



HOW THE TIRE BUSINESS IS TURNING

SHARE OF U.S. CAR-TIRE SALES

Type of outlet	1982	1991*
TRADITIONAL	44%	44%
MULTIBRAND	7	15
DISCOUNT	20	14
MULTIBRAND	10	9
COMPANY-OWNED	11	8
SERVICE STATIONS	—	6
WAREHOUSE CLUBS	8	4
OTHER		

marriage your wife is stepping out on you," fumes Marlo D. Reimer, president of Superior Tire Inc., a 10-store chain in Las Vegas. Others are more measured. "I'm just going to wait and see what Sears does," says Norman K. Trepke, president of Tire Town Inc., which has four stores in Longmont, Colo.

That points up the two-pronged hazard of the move to Sears: Dealers are

"If everybody says they have open systems, how can you tell who really does?"

It's not that all those companies don't mean it when they say they have open systems. It's just that everybody means something different.

So, where does that leave you standing? Most likely, trying to figure out the biases of the players and sorting out what will work best for your company, from the CEO to the PC gurus to the secretarial pool. Here's our take on the situation.



Five blind men and an elephant.

One blind man thought the elephant's leg was a tree trunk, one thought the elephant's trunk was a snake, and so on.

It's the same with open systems. Some people think UNIX® equals open. The only problem is, everybody seems to have their own improved version of UNIX, so you may discover that what you thought was an open system isn't really that open.

Then there are the people who figure if you can plug this hardware into that, then you've got an open system.

Now, we agree that compat-

ible hardware is part of the open systems story. But it doesn't stop there. After all, isn't hardware without software something like a body without a brain?

To get the whole story, one has to backtrack a bit.

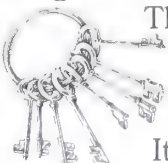
Some history. Some philosophy.

Part of the story is that we got there first. In 1981, we got together with IBM and the Intel people and launched the PC.

We also chose to make MS-DOS® widely available to hardware manufacturers and software developers. And, one after another, they decided to adopt it.

As more and more people took advantage of these computers and applications, MS-DOS emerged as the operating system of choice—quite literally.

Which we believe is the same reason that the Microsoft Windows™ operating system has caught on.



This accessibility of technology spurs competition, which spurs innovations.

It's your basic Adam Smith free marketplace scenario.

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The result: today, you have even more choices at better prices. Hardware manufacturers now

offer you over 1,000 different models of Windows-compatible PCs.

Developing programs for Windows has never been easier. As a matter of fact, there are about 5,000 Windows-based applications from which you can choose.

We, in turn, foster a dialogue with those software developers, which pushes the technology forward even faster.

And there are other options: a range of monitors, printers, fax modems, and of course, the mouse.

In short, we believe an open operating system sets a consistent standard for everybody.

More important, it lets you pursue your own ends, without having to worry about what plugs into what, whether applications are compatible, and so forth.

Which gives you and your company freedom of choice in finding the best way to fulfill your personal computing needs.

In our book, that's what an open system should be all about.

[Some systems are more open than others. To find out more, call (800) 992-3675, Dept. Y98. We'll send you a free brochure, "How to choose the system with the most choices."]

Microsoft



CHAIRMAN RYAN: "IF A LEASE DOESN'T WORK IN HOUSTON, WE CAN MOVE THE PLANE TO RIO"

GPA IS SHARP, BUT CAN IT 'DEFY GRAVITY'?

The plane-leasing giant plans to go public—in the middle of a slump

Never has the aviation industry seen such dark days. Last year, global air travel declined for the first time since the dawn of the jet age. The world's airlines lost a record \$4 billion. Hundreds of aircraft are sitting idle. Call a company offering to lease planes, and you'll find rates have dropped about 20% since 1990 (chart).

Not the best time to take an aircraft leasing company public? The executives of GPA Group PLC might agree, but they're going ahead anyway. Based in the unlikely location of Shannon, Ireland, GPA has grown in 17 years to become the largest force in one of the most esoteric fields around. Until now, it has tapped sophisticated institutions and banks for the billions needed to fund its ambitious growth. But GPA is about to go public with a stock offering worth as much as \$1 billion—with perhaps a third of the shares to be sold by existing holders. The U.S. portion will be led by Goldman Sachs, Merrill Lynch, and Salomon Brothers. GPA's board is likely to give the go-ahead on Mar. 10, and a Securities &

Exchange Commission filing could follow before April.

If it succeeds, GPA would be valued at more than \$2.7 billion—roughly half the value of AMR Corp., parent of American Airlines. Caveat emptor is the rule with any IPO, and GPA's timing is partly dictated by its pressing need for fresh funding. But GPA can point to an impressive track record. Profit growth in the late 1980s averaged a scorching 60%. The industry's decline, beginning with the invasion of Kuwait in August, 1990, halted that. But GPA managed to net \$196.5 million in the last nine months of 1991, on a par with the prior year, partly by shifting focus to the booming Far East and Latin America. "The results

have been remarkably good, considering there was one hell of a recession," says John Hopper, aviation group director at Barclays Bank PLC, a GPA lender.

Founded in 1975 by Chairman Tony A. Ryan, who got into the business as an Aer Lingus dispatcher, GPA was a pioneer of aircraft operating leases. Rather than borrow to buy planes, an airline leases a plane for a fixed term. That helps airlines, especially less creditworthy ones, stay flexible with their mix of planes.

In the early days, GPA bought a plane only after it lined up a client. But as leasing began winning converts, GPA started to gamble, placing huge orders for planes. GPA's goal is to buy close to 10% of the world's annual aircraft production, and it has orders and options for \$21 billion worth of planes in the next eight years. Such buying clout gets GPA about a 20% discount, letting it keep lease rates competitive without clobbering profits. Gross margins on leasing, 16% in fiscal 1991, dropped to 11% in the first nine months of fiscal 1992.

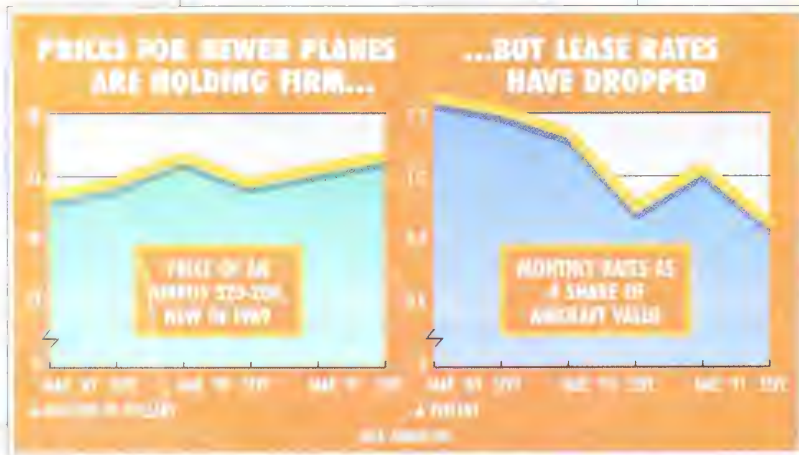
Diversity reduces risks. GPA planes are flying with more than 100 carriers in 50 or more countries. If an airline or even a region turns sour, GPA can shift planes around. "If a lease doesn't work in Houston, we can move the plane to Rio de Janeiro," says Chairman Ryan. "We have the ultimate mobile asset."

POOL PLAYER. Yet pure leasing provides only a third of profits. The real money-spinner is sales of aircraft: GPA leases a plane, then sells the aircraft with its lease to an investor, using complex tax-shelter financing. When the lease ends, GPA will find a new lessee—for a fee, of course. The company got a scare last year when Japanese investors, who bought nearly half its jets in 1989, suddenly pulled back. But so far it has managed to find new sources of funding, notably in Mexico and the Arab states.

The sheer scale of GPA's activities worries critics. With its billions in orders, a prolonged dip in the market could leave it with dozens of unwanted

planes. More than 40 of its 400 planes are already idled. Or GPA could run out of investors to buy 40 to 50 of its lease-and-plane packages every year. "If this slump continues, GPA may not defy gravity for much longer," notes Bruce C. Sutherland, an aviation finance specialist at ANZ Banking Group Ltd. in London.

Executives at GPA



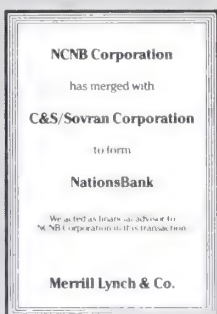
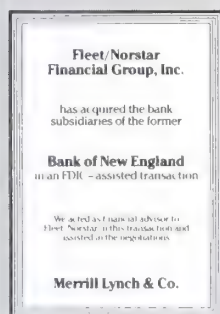
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Merrill Lynch & Co	14,184.0	1	26.8	17
Morgan Stanley	8,896.5	2	16.8	10
Goldman, Sachs	8,608.5	3	16.3	21
Lehman Brothers	8,502.8	4	16.1	18
First Boston/CSFB/CS	7,677.5	5	14.5	15
No Advisor	8,206.2		15.5	750
Totals-Top 5 Advisors	35,090.6		66.3	72
Totals-Deals with Advisors	44,683.7		84.5	242
Totals-All Deals	52,889.9		100.00	992

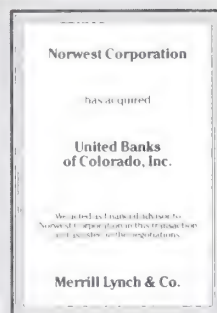
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Top of the News

counter that they've always prospered through innovation. To address a possible shortage of investors, GPA is testing a "securitized" aircraft fund. Like funds packaging mortgages, it would let investors buy a piece of a \$500 million capital pool that owns 14 aircraft. GPA already has a \$100 million commitment from Citicorp. To cut risks, the planes will be leased to 14 carriers in 12 countries.

"Not a dollar of that would have gone into the aviation industry otherwise," says Colm Barrington, CEO of GPA Capital, who says GPA could launch several such funds a year if this one succeeds.

Despite such confidence, GPA executives privately concede the offering's timing isn't perfect. GPA's share price, calculated by private deals among its limited base of shareholders, has

dropped from \$32.50 in August, 1990, to about \$22 recently. But GPA can't really afford to wait for an upturn. Its debt-to-equity ratio is nearing 3 to 1, following \$2 billion in borrowing last year. Bank covenants allow a ratio of 4.5 to 1, but the company needs new equity to keep its plans on course. So, recession or no, GPA is coming soon to a broker near you.

By Mark Maremont in Shannon, Ireland

THE ARTS BUSINESS

THE ART MARKET MAY BE ON ITS WAY BACK

An upswing since last year has dealers cautiously optimistic

Art lovers who dropped by the Berry-Hill Galleries booth at the fourth annual Art Dealers Assn. Art Show got more than a look at works by many major American artists. They also got fortune cookies. "Buyeth a Wyeth," read the message in one. "Bierstadt is the one to have when you're having only one," "Goodfellows, buy Bellows," and "Find love at last with a Prendergast" were among the 25 artful fortunes.

In an art world depressed by slumping sales and weak prices, such playfulness might seem out of place. But as things turned out, the high spirits were right on the money. Although attendance at the show, which ran from Feb. 27 to Mar. 2, was down 8% from 1991, those who did come wrote more checks this year than last, when the Persian Gulf war deepened the art market's gloom.

GOOD OMENS. And this year's opening gala drew more, not fewer, of the big collectors, including Henry Kravis, the senior David Rockefeller, actor Steve Martin, and PaineWebber Inc. Chief Executive Donald Marron. All told, 51 of 64 exhibitors sold art during the show, including several works priced near \$1 million. Says gallery Director James Berry Hill: "The mood has changed—it was definitely upbeat. People were looking to buy."

The shift in sentiment is leading some market watchers to utter the word "upturn." While a more successful art show in itself wouldn't be a big enough por-

tent, there are other positive omens. In January, sales at the second annual Miami art fair more than doubled, to over \$20 million, thanks in part to the presence of many Latin American works, a burgeoning segment. And both Christie's and Sotheby's notched good results at their February auctions of Impressionist, modern, and contemporary paintings in New York. Each sold some 90% of the works on the block and took in

ies are willing to add to their inventory. Sotheby's, too, saw strong dealer buying. Says David J. Nash, head of Sotheby's paintings division: "There's a growing sense that prices will not drift lower."

No one predicts a return to the sizzling '80s anytime soon. In most cases, prices for paintings are off some 30% to 40% from their 1989 peak, and the lower-priced works are selling best. For paintings valued at more than \$1 million, the market remains thin for all but the most exceptional works. Volume is up, but not spectacularly. New York dealer James Goodman, for example, now is selling 10 to 12 paintings a month—an increase from four about six months ago, but still a far cry from the 30 to 40 paintings he sold each month in the late '80s.

Even so, there's an optimism in the art world that wasn't there last fall. Both dealers and auctioneers are talking about a stable base to build on. Some even are looking forward with hope instead of dread to the big, bellwether New York paintings auctions in May. At the New York art show, Upright said consignments for the auctions are good and added: "They'll be better after this show." Right now, the most expensive item on the block is Georges Braque's *Atelier VIII*, estimated to bring in \$6 million to \$8 million.

If Upright is correct—and consignments do pick up—that would be another good sign. That's because the auction business is supply-driven: The better the art that's on the block, the more likely it is to sell

well. And good spring sales, in turn, could infuse the art world with confidence. Although any big surge will require a growing economy, a shot of confidence would go a long way toward putting the art world back on a slow ascent to the levels of the boom years.

By Judith H. Dobrynski in New York



Georges Braque's *Atelier VIII* is expected to fetch \$6 million to \$8 million at the New York auctions in May—the priciest painting on the block so far

totals within the presale estimates. That's a far cry from their 1991 sales, when 30% or more of the works went unsold.

Better yet, says Diane Upright, head of the contemporary art department at Christie's, "dealers were buying, and that's a good sign." That means galler-

#

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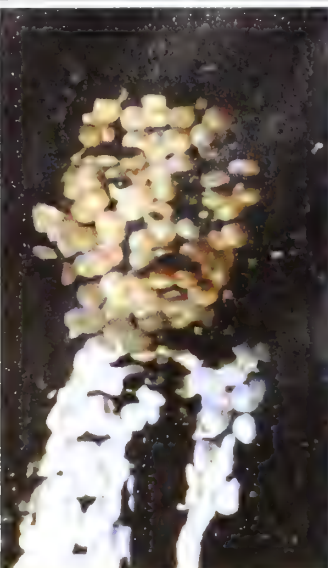
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EDITED BY HARRIS COLLINGWOOD



A DIGITAL OZ

Virtual reality: a computer-created environment that you can "enter" and manipulate. Its scientific applications range from planning the wars of the future to cleaning up nuclear plants. But those uses are a long way off. In the interim, VR is a hot new entertainment medium that may get hotter after people see New Line Cinema Corp.'s *The Lawnmower Man*, the first flick about virtual reality. It opens Mar. 6

A DOWN EAST RETAILER EYES THE FAR EAST

► L. L. Bean is taking its rubber-soled hunting boots abroad. The outdoor retailer, famous for its flannel shirts and camping gear, says it wants to open a 5,000-square-foot store in the heart of Tokyo. Japanese retail giant Seiyu and Matsushita Electric Industrial will run the store, expected to open later this year. Bean says four more Japanese outlets could follow.

THE VIRUS IS COMING! THE VIRUS IS COMING!

► With all the fuss over the Michelangelo computer virus, PC users may be overlooking

another threat to their data: a bug that's set to chomp their files on Friday, Mar. 13.

Unlike the Michelangelo bug, the so-called Jerusalem virus is designed to destroy only certain files on an infected PC's hard drive. And it's widespread: A recent survey by market researcher Dataquest found that 37% of companies with bugs in their networks reported finding a Jerusalem strain. While that's bad news for system managers, it's a delight for makers of antiviral software. XTree, of San Luis Obispo, Calif., says its 24-hour order phone hasn't stopped ringing.

MOTOROLA'S PHONE SYSTEM GETS A BOOST

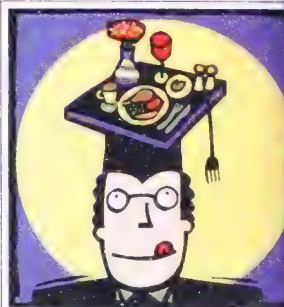
► Motorola has moved a giant step closer to launching Iridium, a worldwide, satellite-based phone network. The low-orbiting satellites that Motorola plans to launch will be allowed to transmit their messages on the same radio frequency worldwide, thanks to a Mar. 3 ruling by the World Administrative Radio Conference in Spain. The possibility that different countries would assign the satellites different frequencies had jeopardized the company's plans.

Motorola still faces a steep hurdle: Getting the system and its 77 satellites off the ground will take \$3.5 billion, up sharply from the company's

A SYLLABUS YOU CAN SINK YOUR TEETH INTO

Old grads look back fondly on their college days for any number of reasons: the late-night bull sessions, the stern but kindly profs, the keg parties, the football games. But college food? Not a happy memory: mystery meat, rubber eggs, pto-maine tuna salad. Ashland University is out to change all that.

The school, in Ashland, Ohio, has won a national prize for best college food service three years running, and it's capitalizing on that distinction in its new mailing to prospective students. Since early February, it has sent chocolate-chip cookies to 20,000 high-school seniors, along with an invitation to a campus tour and free lunch at the school food court. Executive Admissions Director Carl Gerbasi says the mailing "is the most exciting thing I've ever been involved in." Wrestling coach Tom Lindner isn't as thrilled. His athletes have had a hard time making weight since the food court opened.



ny's original \$2 billion estimate in 1990, when it first proposed the network. So the company, which claims it already has some outside financial backing, aims to sign up enough partners that it will end up owning just 15% of Iridium.

ARE THE SHOPPING CHANNELS COURTING?

► Two home-shopping channels are doing a little shopping of their own. Rivals QVC and HSN, which dominate the \$2 billion shop-at-home market, have grudgingly acknowledged that they're discussing the possibility of a merger or

joint venture. QVC Executive Vice-President William Costello stressed that talks are "very preliminary" and the releases were issued only in response to heavy trading in HSN stock, which rose to 6½ in late February.

The companies' caution is understandable. After QVC bought CVN, then the No. 1 channel, in 1989, regular CVN viewers kicked up quite a fuss. To avoid alienating the 20 million viewers who receive both channels, HSN and QVC would probably keep separate shows if they entered into some kind of combination.

WHY HONEYWELL IS SAYING 'CHEESE'

► A month after winning a six-year court battle to uphold its patents on autofocus technology, Honeywell has settled with Minolta Camera. On Mar. 3, Minolta agreed in principle to pay Honeywell \$127.5 million. That sum covers last month's jury award of \$96 million as well as court costs and a worldwide license for the technology. Honeywell now will seek similar agreements with 15 other camera makers. All told, Honeywell could collect \$300 million in back royalties.





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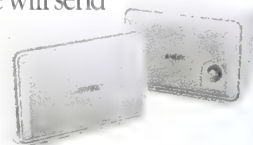
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WHY BUSH WON'T BENCH HIS ECONOMICS TEAM

Once again, angry conservative Republicans in Congress have their knives out. GOP officeholders, unlike their rank-and-file brethren, can't risk venting their frustration at George Bush by backing rival Patrick J. Buchanan. So, right-wingers are taking out their frustration on the economic advisers whom they blame for urging Bush to fiddle while the economy—and his reelection prospects—burned.

Anger toward Treasury Secretary Nicholas F. Brady and Budget Director Richard G. Darman has been building ever since Bush took their advice and accepted a tax hike in the 1990 budget deal—a decision Bush himself now calls a “mistake.” Senator Connie Mack (R-Fla.) demands Brady's firing. House Minority Whip Newt Gingrich (R-Ga.) has barred Treasury lobbyists from his office. Says Mack: “There's no credit available. Small business is being crushed. Nothing's changed. Nothing's happening.”

The conservatives raise an interesting point: Why shouldn't Bush fire his advisers? The economy has slipped at an annual rate of less than one-half percent during the Bush Presidency. And despite a big tax hike, the deficit has doubled.

GOING LOW. Bush's economic team was late forecasting the recession and completely missed the second dip of the slump in the summer. The tight-money policies of Bush's Federal Reserve Chairman, Alan Greenspan, probably exacerbated the recession. And the Bushies just can't convince voters that the president really cares about their economic struggles. Since Bush's fiscal 1993 budget opened up pans from all the tax cuts, Darman has been lying low. Brady, who is in charge of monetary policy, has become the lightning rod. Conservatives hold Treasury chief liable for watering down a capital-gains tax and waffling on real estate tax breaks. Conservatives find the Bush team ever eager to compromise with Democrats on

tax hikes but never willing to lead the battle for tax cuts.

In many ways, Brady is an easy mark. He's been designated the Administration's chief economic spokesman, a role for which the inarticulate Treasury chief is particularly ill-suited. Brady's white-shoes demeanor and unreconstructed optimism look to many like lack of concern. When Brady points to an uptick in light-bulb sales and says, “I see robins on the lawn of our economy,” he may be correctly spotting the early signs of recovery. But as public relations for a President whose approval ratings are plummeting, such comments sound out-of-touch.

Still, Bush seems prepared to brush off the assault on his economic team. One reason is Bush's intense loyalty. Brady is a close friend and has a job for as long as he wants it. And while Darman's relationship with the President has had its ups and downs, Bush still considers his budget chief an asset to the Administration.

Brady and Darman also please Bush by telling him what he wants to hear. Like many CEOs, Bush has surrounded himself with aides who reinforce his own view of the world. Bush is an optimist who's not very interested in economics. When the recovery waned last year, bad news was effectively banned from the White House, forestalling any policy action.

Last fall, Brady and Darman objected to a quick tax cut, betting that the economy—and Bush's political standing—would rebound by early spring. The recovery is behind schedule, and even if Brady and Darman were fired tomorrow, there is nothing Bush can now do to ensure a spurt of growth by Election Day. Giving in to demands for a purge would look desperate. Bush has wagered his Presidency that the Brady-Darman strategy is right. The hand has been dealt, and all he can do is wait to see how it plays out.

By Howard Gleckman



BRADY: LIGHTNING ROD FOR BUSH'S GOP CRITICS

FISCAL WRAPUP

THE SENATE

The already bright prospects of Democrats holding at least their 43-Senate margin in November are getting even brighter. One of the few dark clouds disappeared when Brock Adams (D-Wash.) abandoned his bid for a second term. State Democrats, who had all but written Adams off, now hope that popular outgoing Governor Booth Gardner will enter the race and save the seat.

Meanwhile, four Southern Democrats who seemed endangered after President Bush's gulf war triumph now look safe. The reason: The GOP just couldn't recruit strong challengers

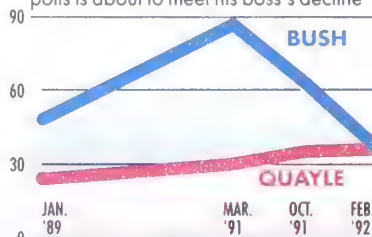
to take on Terry Sanford (N.C.), Ernest F. Hollings (S.C.), Wyche Fowler Jr. (Ga.), or Richard C. Shelby (Ala.).

The GOP could easily lose open seats to strong Democratic contenders in solidly Republican Utah and Idaho. And GOP incumbents face spirited challenges, with Oregon's Bob Packwood perhaps the weakest of the lot.

The Democrats have their vulnerabilities, too. Colorado's Timothy E. Wirth has a tough race against Republican Terry Cosidine. And Alan J. Dixon (Ill.) is under siege in a Mar. 17 primary. But chances are that when the votes are counted, the Democrats will hold, and perhaps expand, their dominance of the Senate.

QUAYLE-BUSH IN '92?

Gallows humor making the rounds at the White House has George Bush begging Dan Quayle not to drop him from the ticket. The reason: The Vice-President's rise in the polls is about to meet his boss's decline.



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THE MAN WHO WOULD BE MEDIA KINGPIN OF EUROPE

Silvio Berlusconi may gain control of French and British TV channels

Europe is about to become the world's largest unified market—except when it comes to television. Media moguls such as Rupert Murdoch have tried—and failed—to come up with a European equivalent of an American TV network able to operate on a Continental scale.

Enter Milan's Silvio Berlusconi. Through his \$10 billion Fininvest Group, Berlusconi is already a key player in commercial TV in Italy, Spain, and Germany. Now, he's tuning in to France and Britain. On Feb. 25, his \$330 million plan to rescue France's ailing La Cinq TV network was approved by its shareholders. In Britain, Berlusconi is emerging as the prime candidate to take over Channel 5, the new national TV network due to start up in 1994. If he succeeds in his bids and turns the stations into money-makers, Berlusconi could reign as Europe's media kingpin.

Berlusconi's strategy could not be less like Murdoch's Sky Channel, which attempted to blanket a broad swath of Europe with identical programming. After his European plan proved to be a costly failure, Murdoch scaled it down to focus only on Britain.

ENTICING DEALS. By contrast, Berlusconi's game plan is to treat Europe as a collection of national markets and pick them off one by one. While starting up stations in Spain, France, and Italy has cost him millions, he has recouped by selling his own programming to the new networks. Since his group also includes Europe's largest broker of advertising space—Publitalia '80—he can offer enticing, multicountry ad deals.

Berlusconi's greatest strength is his stock of around 100,000 hours of TV programming, by far the largest in Europe. He holds European rights to such U.S. series as *Dynasty*, *Dallas*, and *Twin Peaks* as well as thousands of feature films, including *Terminator 2*. And just



BERLUSCONI: NOW A KEY PLAYER IN ITALY, SPAIN, AND GERMANY

as the European Community is pressuring member states to cut down on purchases of U.S. programming, Berlusconi has started his own large-scale productions in Europe. Tricom, a production company jointly owned by Berlusconi,

Germany's Leo Kirch Group, and France's TF1 recently turned out the Emmy-winning miniseries *Phantom of the Opera*, with Burt Lancaster.

Then there's Berlusconi the man. As owner of Italy's top-ranked soccer team, Milan A.C., he has a kind of cult status among the country's youth. In a national poll of teenagers in early March, the down-home Berlusconi ranked as the single most popular figure, surpassing both Jesus Christ and Italy's President.

CINQ AND SWIM? Still, he has his work cut out for him. As he shuttles back and forth between Milan and Paris on his Gulfstream IV, he now faces the hurdle of getting French government approval for his plan to bail out La Cinq, of which he already owns 25%. Faced with sluggish growth in a crowded TV market, La Cinq went bust on Dec. 31 and is broadcasting under a court-appointed administrator. Rival TV networks are lobbying hard to

quash Berlusconi's rescue effort, worried that the lower costs resulting from Fininvest's in-house production and vast TV library would kill competition. The government requires at least 40% of TV programming to be produced in France, another sticking point. "If Berlusconi just plans to broadcast American programs, he won't get our sympathy," says an official of the French government's TV watchdog agency.

Berlusconi may have an easier time in Britain. If he emerges next September as the winning bidder for the new Channel 5, he will be the first foreigner to control a British network. But the new channel also faces tough competition. It will be up against two commercial channels, two national government stations, and a burgeoning satellite and cable industry. "If we can succeed in Britain and France," says Fedele Confalonieri, Fininvest's general manager, "this will be a real turning point for us."

THE BERLUSCONI GROUP

1991 SALES (BILLIONS)

TV & ADVERTISING

Holds stakes in networks in Italy, Germany, France, and Spain; ranks as Europe's largest ad broker **\$3.2**

PUBLISHING

Owns Arnaldo Mondadori, a leading Italian publisher of books and magazines **\$1.5**

RETAILING

Controls Italy's largest chain of supermarkets **\$3.2**

DATA: FININVEST, BW

since its first tentative cable-TV broadcasts in a Milan suburb in 1978, Berlusconi's media empire has grown amazingly fast. In Italy, Fininvest has three national TV channels, control over the country's largest chain of cinemas, and the biggest book and magazine publisher (table). Together, they scooped up more than a third of the \$7.5 billion spent on Italian television and print advertising last year. In 1991, Fininvest companies churned out more TV programming than any European group. In Spain, Fininvest is the power behind Telecinco, the country's newest commercial TV network. In less than a

year and a half, it has sailed past the stodgy government-owned networks to become the country's No. 1 channel. In the booming German market, Berlusconi has a 21% stake in Telefun, a broadcasting joint venture with the Axel Springer publishing group.

Adding Britain and France to the mix would give Berlusconi a much bigger audience for the Hollywood productions he now has in the works. Pentafilm, a production unit set up in Hollywood in 1989, is churning out big-budget films such as the upcoming *Man of Trouble*, starring Jack Nicholson, and *The House of Cards*, with Kathleen Turner.

With a presence in Europe's top five TV markets, Berlusconi would also be able to offer attractive deals to big advertisers such as Unilever and Nestlé. Already, his Publitalia advertising arm has cut multicountry deals with Gillette Co. and Adidas. "We welcome the arrival of Berlusconi, since he'll bring competition to Europe's media market," says Franck Moison, the Paris-based general manager of Colgate-Palmolive France's Household Div. Those are the kinds of words Berlusconi is banking on.

By John Rossant in Rome, with Stewart Toy in Paris, and Richard A. Melcher in London

Commentary/by Paul Magnusson

IS IT AMERICAN? HERE'S AN EASY WAY TO TELL

Clothes may make the man, but does the engine block make the car? And is a Band-Aid applied to an auto worker's finger part of a car's manufacturing cost? Such questions are looming as auto production in Mexico takes off (page 98). They are already provoking an angry dispute with Canadians over Hondas built in Ontario. The answers will do much to shape the auto industry's future in North America.

Negotiators are wrestling over these issues as they try to forge a North American Free Trade Agreement (NAFTA). They have to decide how much North American content a car, washing machine, PC must have to be eligible to move duty-free among the three countries. Detroit auto makers want strict "rules of origin" aimed at keeping mostly Japanese cars from slipping into the U.S. through Canadian and Mexican quick-assembly plants. The rules should ensure that the "guts" of the car are made in North America, says Joseph T. Gorman, chairman of TRW Inc.

AMPLE ADDITION? Gorman and the auto makers are on the right track. Riff content standards should cover nuts, bolts, and pistons—and exclude such intangibles as depreciation and debt costs today counted as local content. For the U.S. to benefit, the best way to measure content is to add up the value of the parts. If half the value

is that of parts made in North America, let the product move anywhere on the continent duty-free. But Canadians and Mexicans like the looser content definition. It makes it easier for them to lure foreigners to set up shop to get duty-free access to the U.S.

Customs provoked the current debate. On Mar. 2, it ruled that Honda Civics made in Alliston, Ont., didn't qualify to enter the U.S. duty-free under the 1988 U.S.-Canada trade pact.

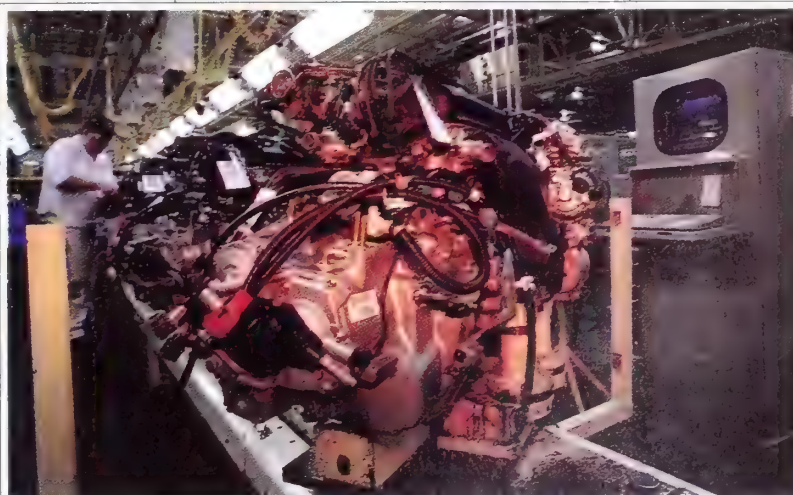
the other hand, Customs lets Honda count toward "local content" the depreciation of the plant's machinery—mostly from Japan.

The verdict: Honda's engine consists mostly of Japanese parts added to an aluminum block cast at a Honda plant. Thus, dropping it into Civic chassis at Alliston didn't meet the 50% rule. The bottom line: A \$17 million bill to Honda for back tariffs on 91,000 Civics that were shipped to the U.S. through Mar. 31, 1990.

Canada will take Honda's side in appeals. The U.S. has been "changing rules in midstream and making unilateral decisions on the rules of origin," says a Canadian spokesman.

To Canada, the uproar also shows how hard it may be to expand the U.S.-Canada pact into a NAFTA accord. "What's the point of negotiating something new if we can't successfully implement what we have?" asks Ambassador to Washington Derek H. Burney.

Difficult or not, the current trilateral negotiations are the best way to proceed, building on what has already been learned from U.S.-Canada trade. In the trade talks, North American content must be measured solely by the value of parts manufactured—not merely assembled—in North American plants. It's not a perfect solution: It may shortchange some labor-intensive manufacturers. But it's better than hiring lawyers to count Band-Aids.



HONDA ENGINES IN OHIO: THE U.S. SAYS THEY DON'T QUALIFY AS NORTH AMERICAN

One problem was uniforms. At Honda plants, everyone from the president to the janitor wears a white coverall with a folksy namepatch. The uniforms boost teamwork and Honda's egalitarian management style. But Customs auditors balked. They excluded such items from North American content because they aren't "direct costs" of manufacturing, as the free-trade pact specifies. The same goes for the salary of the plant nurse who bandages workers' cuts and sprains. On



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DELORS JUMPS SHIP, EUROPEAN UNITY COULD FOUNDER

Will Jacques Delors jilt Brussels for Paris? With France's Socialists in deep political trouble, the power corridors of the European Community are buzzing with the possibility that its intellectual, enigmatic President may soon get an offer he can't refuse: the French premiership and the inside track at eventually succeeding President François Mitterrand. But with the EC's unity drive facing mounting challenges, that prospect has Brussels insiders squirming. "God only knows what will open to Europe without Delors," says veteran Brussels lobbyist Stanley Crossick.

For six years at the EC helm, Delors, 66, has won as much glory as the man who has transformed European unity from dream to near reality. For Delors, Brussels has been the ideal platform for an eventual run at the Elysée Palace.

WINDY BLOW? The former French Finance Minister would prefer to put off a return to Paris until the end of another EC term in 1995. But if the French Socialists receive the heavy drubbing some forecasters expect in national elections on Mar. 22, the beleaguered Mitterrand would find it hard to resist tapping Delors as a white knight to replace ailing Prime Minister Edith Cresson. Last year, Delors, France's most popular political figure, promised to take the post if elected.

Unfortunately, the EC can ill afford a leadership crisis now. With the launch of a single European currency entering the final countdown to Jan. 1, even Delors' diplomatic skills will be sorely tested in the coming months. He already has a fierce battle on his hands over who gets stuck with the EC's burgeoning \$87 billion budget. The EC's top honcho will also be called on to help push the Maastricht treaty on political and economic union, which was voted together last December, through tough ratification

battles in each of the 12 EC countries. Current polls show that the first vote on the measure on June 2 in Denmark will be a tight contest. In Germany, voters are increasingly skeptical about the wisdom of sacrificing the rock-solid German mark for a single European currency.

A departure by Delors before his term expires at yearend would create an immediate EC leadership vacuum. None of the current EC commissioners, one of whom would act as temporary President, has the stature to broker a major deal. A potentially divisive battle for a permanent replacement for Delors has already started. Italian Foreign Minister Gianni De Michelis is often mentioned as a candidate. But Dutch Prime Minister Rudolph Lubbers is the frontrunner. He would in part be a surrogate for the Germans, who feel entitled to the next presidency but may not insist for fear of seeming too assertive. Whoever takes over would likely shuffle the EC staff. That could threaten the current dominance of free-marketters such as Competition Commissioner Sir Leon Brittan.

Such pitfalls for Europe argue strongly for Delors to stay on. But in France, a different dynamic is at work. Delors' return would permit him to take credit for a French economy that seems to be poised for revival. That could also provide him with the necessary momentum to squeeze past former Prime Minister Michel Rocard, the socialist hierarchy's candidate to succeed Mitterrand.

In the next two weeks, Mitterrand and Delors may have to decide between the interests of their party and those of greater Europe. In fact, luring Delors home now would cast doubt on France's commitment to the European Community. But the old axiom that all politics are local may still apply—even in the new Europe.

By Bill Javetski with Patrick Oster in Brussels



THE NEXT FRENCH PREMIER?

GLOBAL WRAPUP

RUSSIA

Having scored early successes with his ruble-stabilization program, Russian President Boris Yeltsin is pressing ahead with a riskier Phase II economic reforms. By Apr. 15, he will hit already reeling consumers by raising the prices of bread, milk, and vodka. He will also decontrol oil and gas prices—a move that will jolt industry, whose output has already plunged roughly 20% since January. Businesses are beginning to send workers home on unplanned vacations, and some economists predict that unemployment could rise to 10 million by yearend from less than a million now. But Yeltsin

hopes another dose of strong medicine will be rewarded with big loans from the International Monetary Fund later this year.

THE NETHERLANDS

Philips Electronics' Chief Jan Timmer has bought time with massive staff cuts, but it's too soon to tell whether his big new gambles on consumer electronics will lead to a real turnaround. Savings from 47,400 layoffs came to about \$1 billion, more than the \$530 million in net 1991 profits the company reported on Feb. 27. Philips lost \$2.3 billion in 1990.

Since no big gains are expected until 1993 from new products such as digital

tape cassettes and HDTV, the company will remain under financial pressure for the rest of this year. Philips may look for partners to share R&D costs.

EUROPE

Never mind leadership problems: The EC can't even decide what language to use. On Feb. 27, the EC court voided a Community ruling because it hadn't been signed in all nine official EC languages. The case highlights the difficulties of satisfying the myriad language demands of the 12-nation EC, whose membership may double this decade. Insiders worry that unless the EC settles on a lingua franca, it could be as paralyzed as Babel.

O.K., SO HE'S NOT SAM WALTON

CEO David Glass stays behind the scenes, but he's keeping Wal-Mart's growth supercharged

As a director of Wal-Mart Stores Inc., the burden sometimes falls upon John E. Tate to grease the skids for the giant retailer in Washington. A former Wal-Mart general counsel, Tate knows plenty of the right people, and capital power brokers certainly know Wal-Mart. But when Tate introduces the company's chief executive, he's often greeted with blank stares. "This guy doesn't look like Sam Walton," their eyes seem to say.

Meet David D. Glass, arguably the most under-recognized CEO in America. Having taken over for Walton in 1988, Glass toils in the shadow of the legendary chairman—and doesn't mind at all. The people in Bentonville, Ark., Wal-Mart's hometown, know who he is. So do the company's 365,000 employees. As for his relative anonymity elsewhere, well, he'd be a fool to compete for attention with Walton, who's no fan of the limelight himself. Glass had to coax him to write an autobiography, which recently drew a \$4 million advance.

But don't mistake Glass's humility and soft Missouri drawl for a lack of self-confidence—or power. Glass, 56, is firmly in control of the world's largest retailer. During his four years in the top spot, Wal-Mart has rocketed from \$16 billion in sales to \$44 billion, surpassing both Kmart Corp. and Sears, Roebuck & Co. in volume (chart). Meanwhile, earnings have grown at a 26% compound annual clip, to \$1.6 billion, while Wal-Mart's value on the stock market has soared to \$62 billion from \$16.8 billion. If the public is unfamiliar with him, Glass isn't bothered: "I have the respect of the organization and am very visible inside."

Given his clout, questions about Glass's leadership are no idle matter, especially with 74-year-old Sam Walton

battling an incurable form of bone cancer that has kept him away from management meetings in recent months. Walton, who was diagnosed with multiple myeloma in 1989, has been undergoing treatments at several facilities, including the Mayo Clinic. He was unavailable for comment.

ROOM TO GROW. But insiders, suppliers, and analysts close to Wal-Mart seem increasingly satisfied that the discount store is in no danger of fading without Walton's evangelistic zeal. In fact, most analysts think Walton's projection that Wal-Mart will top a remarkable \$100 billion in sales by the end of the decade is

within reach. Despite its tremendous growth, the retailer has left plenty of territory untouched in the U.S.—not to mention abroad. "You can't replace a Sam Walton," says Glass, "but he has prepared the company to run well whether he's there or not."

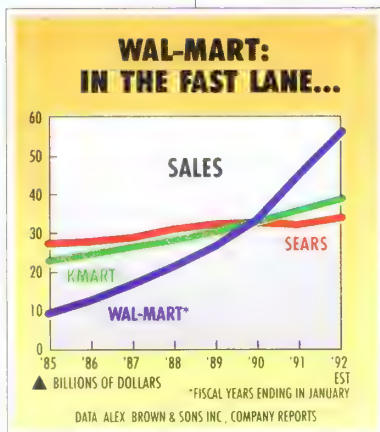
Still, Glass faces some huge challenges, many of which Walton never had to contend

with. Wal-Mart is now one of America's corporate giants, with all the attendant complexity. Walton's bare-bones corporate culture should defend against the sort of corpulence that undid Sears. But rival discounters, such as Kmart and Dayton Hudson Corp.'s Target Stores, are hardly standing still. And Wal-Mart, with nearly 2,000 stores, is feeling some backlash against its size and clout (page 60). Glass's task is to keep Wal-Mart from developing big-company disease—an ailment that can attack even America's brightest stars. Just look at IBM.

So far, though, Glass has allayed most fears about life after Sam. He doesn't rally the troops with the same fervor, "but frankly, you probably remember more of what he said," says Tate. Like Walton, Glass delegates authority well

and communicates with a disarming dose of humility. His stern gaze and thick, almost menacing eyebrows belie his considerable charm and dry humor.

Walton recognized Glass's abilities in 1984, when he engineered a job switch between Glass, the chief financial officer, and Jack Shewmaker, the president. While the company denied the two men were being pitted against each other, it was clear that only one would rise to the top. Sources say Shewmaker's trouble was a short fuse and a tendency toward top-heavy decision-making. Glass's collegial style eventually landed him the job. Nevertheless, the move was a surprise



...AND HERE'S HOW GLASS AIMS TO KEEP IT THAT WAY

► **GROCERIES** Build more 'supercenters,' 50% larger than the biggest Wal-Mart, that carry everything the regular stores do—plus food. Six of them are currently up and running; 15 more to open this year

► **BIGGER STORES** Make room for wider aisles, rest benches, and other inexpensive customer amenities. Goal: To keep customers shopping longer and drive up Wal-Mart's sales per square foot

► **TECHNOLOGY** Lower costs through new inventory controls; has already invested \$600 million in five years. One system allows 2,000 vendors to see immediately how their merchandise is selling

DATA: BW

Shewmaker's charisma, merchandising talents, and close relationship with Sam Walton. The two often hunted together or played tennis. Glass does not. Although he speaks of Walton with affection and near awe, Glass doesn't socialize regularly with the boss.

But Glass does share Walton's rural, scrabble roots. The oldest of three, Glass grew up in tiny Mountain View, Mo., which now boasts a golf course and annual tournament named after him. His mother worked for 20 years as a supervisor in a uniform factory, while his father ran a feed mill. "I'm still the same old kid he always teased, and I'd just whop him if he teased me," says 77-year-old Myrtle Glass, who refers to her son as "Dayne," his middle name. Glass still does his parents' income taxes as well as his own. When the family feed mill closed, he had to keep the books.

In high school, Glass was a bright, if different, student who would skip school to play pool. After graduation, he joined the Army and landed in New Mexico, where he met 15-year-old Ruth. He courted her at a drive-in restaurant. On a date from his buddies, Glass approached her and got her phone number. When he called her later for a date, though, she turned him down. "He

called for about three weeks in a row. I weakened," says Ruth. Three months later, they married.

After his stint in the Army, Glass enrolled at Southwest Missouri State University to pursue a business degree. He worked nights as a dispatcher at a trucking company to support his young family and attended school during the day, sometimes nodding off in class.

Glass doesn't rally the troops as fervently as Walton, but 'you probably remember more of what he said'

With his business degree in hand, Glass landed a job in 1960 with a small drugstore chain, J.W. Crank Co. in Springfield, Mo. He helped Crank's open some of the first "super" drug stores and later began leasing counter space for the company in the discount stores that were just emerging. After Crank's, he moved to Austin, Tex., to build a Howard Johnson motel. But he missed retailing and soon returned to Missouri to join grocer Consumers Markets Inc.

While working at these Missouri chains, Glass became acquainted with Sam Walton. At the time, most businesspeople thought Walton was crazy for building his discount stores in towns that were deemed far too small to support them. With Walton urging him to join Wal-Mart, Glass attended the opening of Sam's second store in Harrison, Ark. On that hot July day in 1964, Walton had arranged for truckloads of watermelons to be stacked in front of the store, with donkey rides in the parking lot. When the watermelons popped in the heat and the donkeys did what donkeys do, the mess was tracked through the store. Glass gave Walton some advice he has long since lived to regret: "I suggested he get into a different line of work." Walton ignored the tip but didn't forget Glass. He hired him in 1976.

THINK SMALL. If Sam is the inspiration at Wal-Mart, it's Glass who provides the detailed execution. Most recently, he has led the charge into groceries and bigger stores. He has also shaped the high-tech inventory systems that drive down Wal-Mart's costs (table).

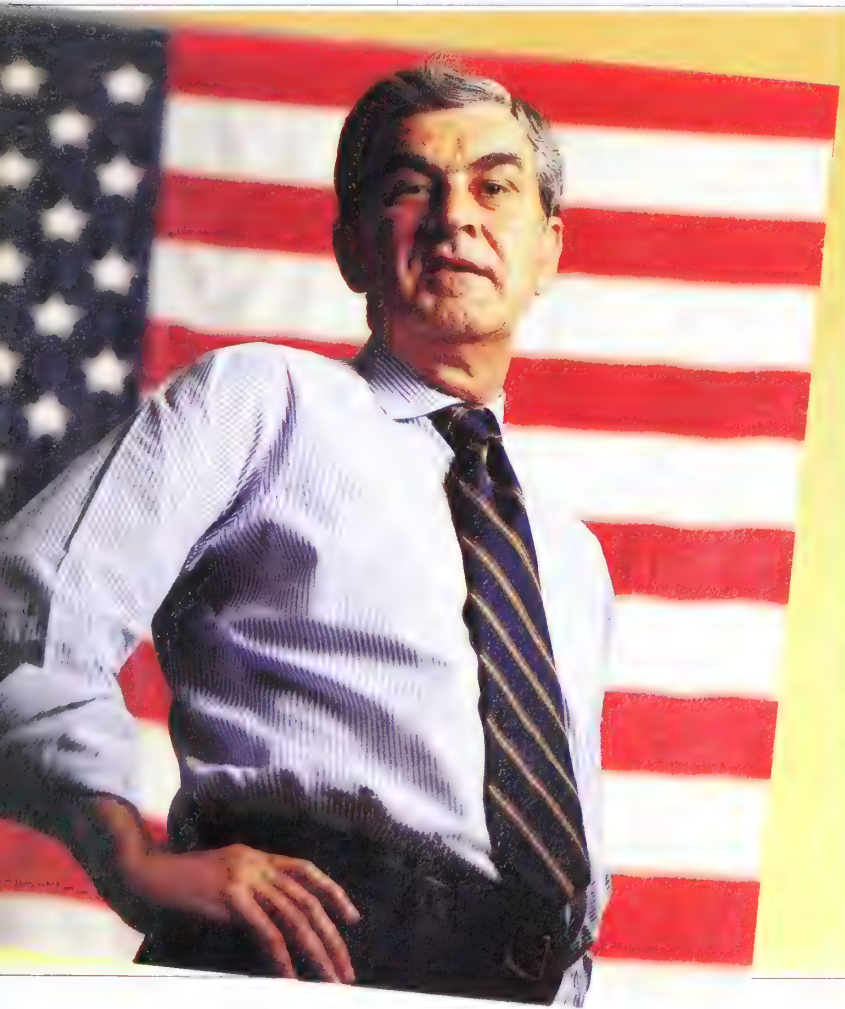
For all his focus on such lofty matters, Glass never loses sight of the mundane details of successful retailing. Like all senior Wal-Mart managers, he spends at least two days a week visiting the company's far-flung stores. The goal is not to supervise a store's employees, or "associates," as they're called at Wal-Mart, but to listen to their concerns.

Glass is adamant about trying to run Wal-Mart as he would a small company. At management meetings, "I force us to talk about individual stores. In the merchandise meetings, I force us to talk about how individual items are selling in individual stores," he says. It's not enough for a manager to know there's a Wal-Mart store in a particular town. He or she had better know what street it's on and what competitors are nearby.

Glass is equally exacting about costs. "He is one of the tightest men on the face of the earth," says Executive Vice-President Bill Fields. Glass rents sub-compact cars and shares hotel rooms with other Wal-Mart executives when he travels. At headquarters, he pays a dime for his cup of coffee, just like everyone else. His office in the sprawling red-brick building barely seats three. And there's no fancy executive washroom—though he once enjoyed such amenities for a day or two when his colleagues built an out-house in his office as a joke.

That's not to say that Wal-Mart hasn't made Glass a very rich man. True, his \$710,000 annual salary helped prompt the United Shareholders Assn. to dub him the nation's "most underpaid" CEO. But his 1.5 million Wal-Mart shares are worth \$82 million and growing.

Glass hardly lives the life of a million-



aire, but he has indulged a few of his favorite interests at home. His house in quiet Bentonville includes a swimming pool and a game room with five TV monitors for watching sports events. And after years of owning Ford station wagons, he now drives a white Lexus. The irony of driving a Japanese luxury car certainly isn't lost on Glass, whose company proudly espouses a "Buy American" philosophy. But he makes no apologies, either. The car was a gift from his family for Father's Day, he says, and that's all there is to it.

Since suffering a heart attack in 1983, Glass has been trying to limit his late nights. His life outside the office revolves mainly around family and sports. He's an avid basketball and baseball fan and attends the St. Louis Cardinals' spring training in Florida every year with his family, which now includes seven grandchildren. His wife, Ruth, a born-again Christian, often travels to speak to church and women's groups. His three children all run retail shops of

their own: Dan is in jewelry, Don in sports memorabilia, and daughter Dayna sells children's clothing. The stores are owned by Glass Enterprises, the family's investment vehicle.

Keeping up with Wal-Mart, however, promises to become more demanding than ever. The company is growing at a breathtaking pace—with about 150 discount stores, 40 Sam's Wholesale Club warehouse-style outlets, and 15 supercenters to be added this year. Glass sees no end in sight for Wal-Mart's U.S. expansion, especially since it has just started moving into California and the East Coast. Wal-Mart is even testing the waters in foreign markets, with two stores owned in a joint venture in Mexico.

'NO SUPERSTARS.' Perhaps the greatest obstacle facing Wal-Mart now is its sheer size. Communicating with the company's "associates" will become increasingly difficult. And developing leaders to run the chain is another hurdle. "There are no superstars at Wal-Mart," Glass insists. "We're a company of ordinary

people overachieving." But finding enough "overachievers" to handle Wal-Mart's growth will be the hard part.

Now that Wal-Mart isn't a retailing underdog anymore, it also risks resentment from consumers, suppliers, and others affected by its tactics. Critics have long accused Wal-Mart of destroying mom-and-pop retailers, the bedrock of small-town America. And Wal-Mart recently created a storm of protest among manufacturers' representatives when it notified suppliers that it wanted to talk to the companies directly. The reps claim Wal-Mart is illegally trying to grab their commissions. Wal-Mart insists it simply needs to work more closely with vendors to handle an insatiable appetite for merchandise.

Glass isn't backing down. "It's the right thing to do," he declares. "We're agents for our customers. We need to protect their interests." Now, those words might have come from Sam Walton himself.

By Wendy Zellner in Bentonville, Ark

HOW TRUE-BLUE IS WAL-MART'S 'BUY AMERICAN' PLEDGE?

In the bus station-like lobby at Wal-Mart headquarters—and in front of the mounted fish—hangs a banner proclaiming the company's "Buy American" program. On a nearby sign, the retailer boasts it has saved 60,347 jobs that would have gone overseas.

Wal-Mart Stores Inc. Chairman Sam M. Walton started the program in 1985, ostensibly to help the U.S. save jobs and cut its massive trade deficit. But is Wal-Mart really living up to the "Buy American" hoopla it creates in its stores? Not everyone thinks so. Jeffrey L. Fiedler, secretary-treasurer of the AFL-CIO's Food & Allied Service Trades Dept., has studied reams of U.S. shipping data and has walked Wal-Mart aisles for the past couple of years. He contends that the company is deceiving customers into believing that just about everything it sells is American. "Nobody wraps themselves in the flag like these guys," he complains.

MADE IN CHINA. Most retailers, including Wal-Mart, import tons of foreign products. But none of the others crow so loudly about their efforts to buy American-made goods. "I hold Wal-Mart to a higher standard because

they created the standard," Fiedler says. Some of the company's biggest private brands—over which Wal-Mart has the most control—come from overseas. Fiedler points to ceiling fans from a group of Chinese manufacturers that lost a U.S. dumping case. And most of Wal-Mart's private shoe labels

prices are up to 5% higher than comparable foreign goods. The trouble is, many U.S. factories simply can't supply Wal-Mart's incredible demand.

William J. Lynott, president of the nonprofit Buy America Foundation in Abington, Pa., acknowledges that it's impossible for Wal-Mart to supply its enormous needs within the U.S. But while he welcomes any effort by Wal-Mart to "Buy American," he contends that the retail giant "is not practicing what they preach." Lynott says that any retailer with Wal-Mart's clout could do much more to pressure its suppliers to expand capacity and bring manufacturing back on shore. "Let's just hope they're trying," he says.

Peter Howell, president and CEO of Mr. Coffee Inc., which produces coffee-makers in the U.S. for Wal-Mart, doesn't think consumers care much about where a product was made. "I think they care more about price," he says. That may be true. But if all the flag-waving going on at Wal-Mart makes consumers feel they're doing their part for Uncle Sam, they may be wise to check the label to see which Sam is really benefiting.

By Wendy Zellner in Bentonville, Ark.



IN TOPEKA: SAM WALTON LEADING A PEP RALLY BEFORE HE TOOK ILL

come from China, and some of its Pro-mark hand tools are made in Taiwan.

Wal-Mart CEO David D. Glass shrugs off the criticism. He concedes that Wal-Mart buys plenty of foreign goods, although he can't say how much. Still, he insists, the retailer favors U.S. manufacturers that can meet its quality standards, even if their

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WILL POLITICALLY CORRECT SELL SWEATERS?

As Esprit's Susie Tompkins tries a comeback, causes still come first, profits second

The champagne is flowing freely, the Vietnamese spring rolls arrive by the trayful, and Susie Tompkins happily sifts through the crowd in pearls and her signature green jacket. "There's Susie," someone says, pointing out the founder and creative director of Esprit de Corp. Although Tompkins is worth millions by virtue of owning a large chunk of one of the nation's best-known apparel companies, everyone calls her Susie. And this crowd—

young, thin and mostly dressed in black—has gathered in Esprit's New York showroom to see Susie's eponymous new collection of women's sportswear. Or so they think. Tompkins, who's often more radical than chic, isn't about to deliver the usual svelte models and runway show. Her introduction of the Susie Tompkins line will make a statement. A group of gospel singers makes its way onto the stage, then belts out "Hallelujah." The crowd cheers. "Most fashion events are about fantasy," says Tompkins. "Tonight is about reality. There will be no runway."

Instead, the crowd is introduced to the Reverend Cecil Williams, the minister of San Francisco's Glide Memorial United Methodist Church. Williams leads the chorus in "Amen" and then launches into a long, meandering sermon about social justice.

Susie Tompkins is back. After a two-year hiatus from Esprit and an acrimonious divorce from her husband and business partner, Doug Tompkins, Susie has pulled her life together and regained control of the company she and Doug started 23 years ago. But at 49, the petite ex-hippie from San Francisco is hardly trying to cultivate an image of power or success. Instead,

she's embracing a panoply of social causes from environmentalism to AIDS to the homeless. And by weaving political correctness into the fabric of Esprit, she hopes to teach the world a thing or two about corporate responsibility.

Meanwhile, her new partners are trying to teach Tompkins a thing or two about running a business. Esprit was a force to be reckoned with for most of the 1980s, when its popularity among teenage girls fueled heady sales

while Stein worries about making money. Esprit's message of social justice suits both partners. Susie insists she doesn't give a hoot about profits as long as Esprit stays socially responsible in its marketing.

CHEAPER DEBT. The crucible will be the new Susie Tompkins line. With sales at the privately held company stalled at about \$350 million for the past two years and profits buffeted by the recession, Esprit needs new products to grow. It recently restructured its \$100 million in LBO debt with a cheaper \$90 million loan organized by

PaineWebber Inc. Still, in order for this fiscal year's earnings to match last year's net of \$11 million, insiders say that Stein is laying people off and cutting costs such as the TV advertising budget. Ultimately, Esprit will have to boost revenues to keep earnings healthy.

Tompkins is just happy to be back in the design business. Padding around her New York showroom in a cardigan, polyester pajama pants, and suede bucks, she speaks softly, almost demurely, ending sentences with questions and looking to employees for approval or suggestions. "Aren't these clothes just like the ones we love and have in our closets forever?" she asks.

Susie Tompkins is like that—soft, vulnerable, open. But don't be fooled by the girlish persona. She also has the makings of a clever marketer who uses her image to sell clothes. In a video that will be shown in department stores, images of the Reverend Williams preaching at Glide Church are interspersed with shots of a Susie lookalike modeling the new designs in a meadow. Flash to Tompkins slouched in a chair, talking about her childhood and memories of her mother. "When I was little, I wanted to be a nun, a cowgirl,



Before the split: When Esprit landed on the block, Susie's surprise bid won. Doug got some \$120 million to go away

growth. But it has foundered since 1987 because of high costs, a loss of design direction, and an expensive effort by Doug to build glitzy, free-standing retail stores.

The repair job has fallen to venture capitalist Isaac Stein, who in 1990 teamed up with Susie and two others—including Bruce Katz, the founder of Rockport shoes—to engineer a leveraged buyout, worth an estimated \$240 million. The deal paid Doug about half of that to go away. Now, Susie manages the design process,

leader, a professional ski racer," muses. "Mother said to me a dozen times: 'You'll never amount to a row of...'"

her personal approach is vintage Tompkins, who is happy to share the details of her tumultuous background. Born Susan Tompkins and raised in the affluent Russian Hill section of San Francisco, Susie was sent to boarding school when she was only 10 years old because, she says, her mother couldn't handle her. After that came a series of private schools. But when her father, a real estate developer, went bankrupt when she was 15, her privileged existence came to an end. The family moved to a smaller house, and Susie "had to start shopping at Sears." She eventually graduated from high school and left behind the pearls-and-ropes set.

"I was a rebel," says Tompkins. "I was difficult to control." She dropped out of college and instead went to Lake Tahoe, where she made a night as a Keno player in a casino. Along the way, she picked up a hiker who was trying to make the U.S. Olympic ski team. Like her, Doug Tompkins was a prep school dropout without a college degree, and they hooked up immediately. It was the love, says Tompkins: "You had instant relationships, you know?"

The two got married, before long, Susie and her friend Jane Tise started making dresses in Susie's kitchen table. They brought them to John Magnin, an upscale San Francisco store, and Susie's daughter modeled the dresses on herself.

Over the next few years, Tompkins and Tise hoped enough "Plain Jane" dresses to build an \$80 million business. In 1976, Doug and Susie bought Tise as another partner out, and the business moved into Esprit de Corp. For a time, it seemed as if Esprit could do no wrong. While Doug mastered the art of marketing appeals to teenage girls, Susie designed colorful, casual clothes. The company expanded into 34 countries, and worldwide sales grew to \$1.2 billion, although Esprit collected only one-third of that. Doug was considered a brilliant market-

er, but, like Susie, his eyes were everywhere but on the bottom line. Employee benefits were so lavish that Esprit was dubbed Little Utopia. Perks included raft trips in Africa, free language lessons, and backpacking trips to the Grand Canyon.

Things started to fall apart in 1987. By June of that year, Esprit's sales had reached \$412 million in the U.S., but operating profit had fallen 92%, to \$5 million, according to an internal document. Meanwhile, the Tompkins' marriage began to unravel. Reports of Doug's philandering were rampant, and the couple clashed over Esprit's direction. Doug wanted to keep making clothes for the shrinking junior

en her own age. The Susie Tompkins line targets women 25 and older. The hope is that it will do \$25 million the first year and grow quickly from there. The line's fitted jackets, long, flowing skirts and dresses, and Tompkins' signature pajama pants are a major departure from the logo sweat-shirts Esprit makes by the millions. The overall look is Tompkins' own: Elegant, urban blueblood with a twist.

SPARRING MATCH. Esprit's newest ad campaign, however, shows that all the fireworks aren't over. Dubbed "What would you do?," print and TV ads for the company's image campaign feature sober black-and-white photographs of urban teenagers

expressing abbreviated, liberal political views. Some aren't wearing Esprit clothes. Susie loves the ads, but in a recent meeting with international affiliates, Bruce Katz sparred with her about their appeal. The meeting blew up, says one participant, and now the campaign is "evolving" into color ads with teenagers wearing Esprit apparel.

Such bickering is just the sort of thing Esprit can't afford right now. Companies such as The Gap and The Limited's Express have stolen much of Esprit's market by offering consistently trendy merchandise in free-standing stores. Even if acting CEO Stein stabilizes the company, Esprit remains tied to a troubled distribution system: shops within such department stores as Bloomingdale's and bankrupt Macy's. Stein realizes he has no experience with such retailing problems and has hired Fritz Ammann, who now runs upscale shoemaker Charles Jourdan, as his permanent replacement.

Oddly enough, Doug's presence is still felt at the company. One em-

ployee says Susie often starts meetings by urging: "Everybody take a minute and think about Doug, because we wouldn't be here without him." But Susie has clearly moved out of his orbit, even if the results are no less cosmic. "She doesn't want to think of herself as a businesswoman," says Katz. "She thinks of herself as a social activist." If her politics activate Esprit sales, her new partners won't mind that a bit.

By Laura Zinn, with Michael Oneal, in New York



On her own: By weaving causes from the environment to AIDS into the fabric of Esprit, Tompkins hopes to teach the world a thing or two about corporate responsibility

market, while Susie wanted to dress the growing population of working women who thought Esprit was for teenyboppers. In 1988, Susie took two years off, and Doug became chief operating officer. In December, 1989, Doug and Susie put Esprit up for sale, and six months later Doug agreed to be bought out. He could not be reached for comment.

With Doug out of the picture—the company says he's buying land in the Brazilian rain forest—Susie is finally dressing wom-

SMOKING OUT THE ELUSIVE SMOKER

Data bases give tobacco companies direct access to customers

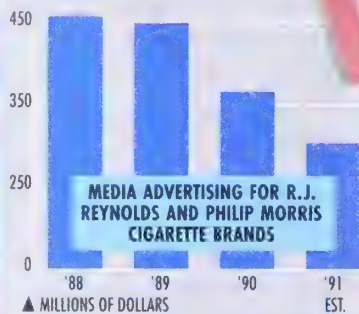
When Philip Morris Inc. rolled out its Marlboro Medium cigarettes last spring, the new product got the usual barrage of support from print advertising and billboards. But the mighty marketer also used a more direct way of selling its latest smoke. The company sent buyers of competing Winston and Camel cigarettes a fancy package containing a fold-out colored ad and \$3-off coupons good for a carton of Marlboro Mediums. That wasn't all: The pièce de résistance was an outside box with the Marlboro Medium logo outside and five packs of the new cigarette inside. Today, Marlboro Mediums have a 1.5% share of the U.S. cigarette market.

How does the country's largest cigarette maker know who smokes what? Along with R. J. Reynolds, Brown & Williamson, and other tobacco companies, Philip Morris has spent hundreds of millions of dollars to collect the names, addresses, and brand preferences of close to 70% of the nation's 40 million smokers, says Stan Rapp, who is an independent consultant on data-base marketing. As tobacco marketers have trimmed their mass-media advertising (chart), they have been making more of those vast data bases. "Tobacco companies are learning they don't need traditional media as much anymore," says Michael J. Wolf, a consultant with Booz Allen & Hamilton Inc. who specializes in data-base marketing. "Instead, they're creating their own channels that talk directly to smokers."

You won't hear the tobacco companies boasting about their newfound expertise, though. Citing intense competition, the industry leaders are mostly mum about their data bases. Most information on these efforts comes from outside

marketers and consultants. Nor will Philip Morris and R. J. Reynolds Co. discuss their targeted marketing strategies for Merit Ultimas and Camel Wides, two new brand extensions. But judging from earlier campaigns, the two companies will probably take advantage of their data bases to lure confirmed smokers of rival brands to try their new products. Since the margins on cigarettes run up to 35%, and since an average smoker spends about \$750 a year on cigarettes, it's worth a lot of effort to

TOBACCO ADS ARE OFF...



get a smoker to switch. Data-base marketing is increasingly a necessity for the tobacco companies. Using mass media to reach tobacco users is growing inefficient as the number of smokers slowly drops: In 1991, sales of cigarettes declined for the 10th year in a row, slipping 2.4% from 1990 levels, according to John C. Maxwell, an analyst at Wheat First Securities Inc. Today, less than a third of the adult population smokes. True, that's still a sizable number, but it's much smaller than, say, all the users of toothpaste or aspirin, products that can get a bigger bang from mass media.

But tobacco companies have come under heavy fire when they've attempted conventional forms of niche marketing—for example, targeting minorities or women. And they are eager to avoid any accusation that they're trying to attract youngsters to smoking. In this increas-

ingly hostile environment, some lawmakers are pressing to restrict print and billboard cigarette advertising—adding to the ban on televised cigarette ads, which dates back to 1971. While marketers prepare for that possibility, data bases are a way for tobacco companies to lie low and still get their message out to users of competing brands. Luring away a competitor's customer is one of the few acceptable ways to grow in the U.S. tobacco market.

CHAIN MAIL. Reynolds is so convinced of the power of nontraditional tactics such as data-base marketing that it recently refused to sign its usual 12-month contracts with major magazine publishers and billboard companies for 1992. It will still use print and billboard advertising, of course, but less of it. A company spokeswoman confirms that spending on such traditional media will decline so that Reynolds can concentrate on promotions, which include data-base marketing as well as in-

...AS OTHER STRATEGIES FLOURISH

Develop data bases of millions of smokers and their addresses

Lure smokers from other brands with mailed samples and coupons

Survey smokers for opinions on established and new brands

Build brand identity with items such as apparel catalogs and posters

store deals.

Reynolds was the first tobacco manufacturer to use data bases, harvesting smokers' names about 10 years ago. It's a laborious process. In most cases a magazine ad or a Sunday newspaper insert asks smokers to answer questions about their brand preferences. They must also sign a statement affirming they are at least 21. In return, they typically receive coupons or free samples while their names and addresses are entered into computerized lists.

To ferret out even the smokers who don't grab cents-off coupons, tobacco companies try offers for T-shirts and other merchandise. Reynolds' Camel Cash program inserts proof-of-purchase coupons in every pack. Smokers send them in to get items sporting the Old Joe cartoon logo. For the Dakota brand sold only in parts of Arizona, Reynolds has had retailers display catalogs offer

items such as a double-length motor-
le chain belt with Dakota buckle.
ometimes the incentives are more elab-
ate: Last summer, Philip Morris ran a
deepstakes ad in *Sports Illustrated* of-
ing a Corvette as first prize. To enter,
consumers sent back a coupon revealing
brand they smoked.

One of the most successful data-base
mpaigns was the "blind taste test"
Philip Morris staged in 1987. The compa-
ran two-page advertisements in ma-
magazines offering smokers two free
cks of an unnamed brand. The 2 mil-
smokers who answered the attached
questionnaire were sent packs of Merit.
Philip Morris then followed up with ex-
sive mailings. The \$30 million cam-
gn converted half a million smokers
the brand, at least temporarily, ac-
cording to marketing consultants fami-
with the mailings. Merit's share has
in the past two years, however,
mpting Philip Morris to introduce its
w Merit Ultimas brand in an attempt
ture smokers back.

VED THE WAY. The efforts of the to-
eco companies have caught the atten-
a of other marketers. Says Rapp:
they have really paved the way for
er consumer goods companies. It's
next wave in marketing strategies."
ny companies have to sell in markets
ere low growth or no growth is the
e these days. So they, too, are explor-
high-tech marketing methods to
hngthen ties to existing customers
to forge new bonds with their rivals'
trons.

Kimberly-Clark Corp. and Procter &
mble Co., for example, have been col-
ing names of new mothers from hos-
als, doctors, and other sources. Both
panies send moms coupons for dis-
able diapers and other baby products
most as soon as they arrive home from
hospital. As the child grows older,
manufacturers send coupons for
ger diapers, which can go for a hefty
a pack or more. Data bases have
o infiltrated the beer and soda indus-
s: Pepsi-Cola Co. plans to send a mil-
free cases of Diet Pepsi to die-hard
t Coke drinkers, plucking them from
ata base it has collected.

These programs can backfire, though.
ndall's Food Markets in Houston tried
a data-base program that offered
ates to frequent shoppers. But it shut
program down because it was too
bersome and costly. And when a mi-
was mailed a Camel T-shirt four
rs ago, the ensuing outcry prompted
ongressional hearing. But the prom-
of winning a new customer is a
ong one. It seems the cigarette mak-
have helped introduce a marketing
it few companies will want to break.

By Walecia Konrad in Atlanta, with
Christopher Power in New York

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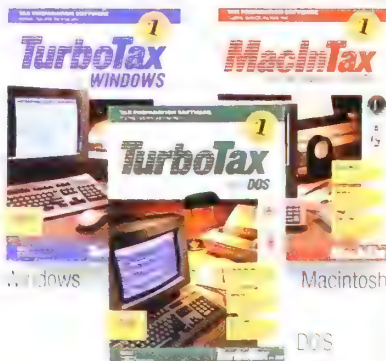
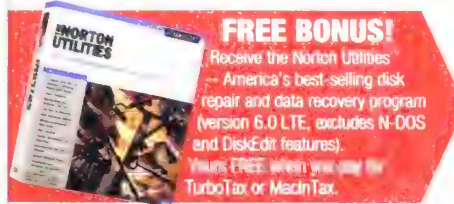
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WHY NOT WRITE OFF 1991

FROM CARS TO COMPUTERS, THE YEAR WAS A NIGHTMARE, WITH RESTRUCTURING

Computer makers eliminated tens of thousands of jobs in 1991. New home construction dipped to its lowest level in 46 years. And Detroit's Big Three auto makers lost \$7.8 billion. As if to punctuate a year's worth of bad news, the final three months turned out to be the worst of all for most companies: Fourth-quarter profits plunged 27% from the same period in 1990 on a 1% dip in sales, according to Standard & Poor's Compustat Services Inc. Can it get any worse? "I think we're at the low point of corporate profitability," ventures Stephen S. Roach, senior economist at Morgan Stanley & Co. "From here on out, it will only get better."

That ought to make a lot of people breathe easier. Still, it will be a long time before anyone forgets 1991. For the full year, earnings for the 900 companies in BUSINESS WEEK's Corporate Scoreboard fell a total of 19%, on a meager 1% sales gain. It was the third consecutive annual decline for corporate profits and the worst percentage drop since 1982.

The biggest drag on quarterly and 12-month results can be summed up in one word: restructuring. As the year grew progressively worse, dozens of America's largest companies announced reorganizations. The combined restructuring charges of \$16.4 billion, excluding the onetime write-offs many companies took to cover retired employees' health care benefits, sliced a whopping \$2.40 a share, or 47%, off profits for the Standard & Poor's 500-stock index in the fourth quarter alone. That compared with restructuring charges of \$2.21 a share for all of 1990, reports PaineWebber Inc.

A FIRST. IBM led the list in November, with plans to restructure and take an aftertax charge of \$3.4 billion. Big Blue's subsequent \$564 billion deficit for the year was the first loss in its history. In December, General Motors Corp. said it would shutter 21 plants and lay off 74,000 workers by 1995. Its \$1.8 billion quarterly write-down led to a \$4.9 billion loss for all of 1991—the biggest since the auto giant was founded in 1908.

It's no surprise, then, that computer companies and auto makers took the biggest earnings hits last year. While computer makers had nothing like the Big

Three's multibillion-dollar disaster, they did record \$664.9 million in the minus column—vs. profits of \$8.4 billion in 1990. Eliminate the computer group from the Corporate Scoreboard results, and last year's fall-off in profits would have been 14.1%.

The corporate restructurings may

have laid the foundation for a profit turnaround in 1992, but it will probably be a weak one. Most economists are forecasting profit growth of only 8% in 1992 and 13.4% the following year. That compares with 15% and 19% for the two years following the recession in 1982.

Still, there are more than a few posi-



THE LEADERS IN 1991

THE TOP 25 IN SALES

	1991 sales Millions of dollars	Percent change from 1990
1 GENERAL MOTORS	\$123,056	-1%
2 EXXON	104,217	-2
3 FORD MOTOR	88,286	-10
4 IBM	64,792	-6
5 GENERAL ELECTRIC	60,236	3
6 SEARS, ROEBUCK	57,242	2
7 MOBIL	56,432	-4
8 PHILIP MORRIS	48,064	8
9 AT&T	44,651	2
10 WAL-MART STORES*	43,887	35
11 CHEVRON	40,900	-4
12 DU PONT	38,695	-3
13 TEXACO	38,322	-8
14 K MART	34,155	5
15 CITICORP	31,839	-17
16 CHRYSLER	29,400	-4
17 BOEING	29,314	6
18 PROCTER & GAMBLE	28,229	9
19 AMERICAN EXPRESS	25,763	6
20 AMOCO	25,325	-10
21 KROGER	21,350	5
22 AMERICAN STORES	21,315	-6
23 UNITED TECHNOLOGIES	21,262	-2
24 CONAGRA	20,485	15
25 ITT	20,421	-1

* Fiscal year ended January, 1992

EVERYONE ELSE DID

IN LEADING TO HUGE LOSSES AND EARNINGS OFF 19% OVERALL

signs for sustained growth. Layoffs and voluntary retirements have cut pay-costs. The 32% decline in the prime rate has reduced interest-rate expenses in many businesses, and refinancing of long-term debt has helped improve balance sheets. Plus, inflation is running at a modest 2.6%. "Companies have im-

proved their efficiency and reduced their operating costs," says Lynn Reaser, chief economist at First Interstate Bancorp in Los Angeles. "With an increase in volume, they will see a very considerable increase in cash flow and profits this year."

Then again, plenty of economists pre-

dicted an uptick in corporate profits for last year's second half, and it never materialized. The gulf war victory helped ease the economy out of recession during first-quarter 1991, but gross domestic product grew at only a 1.3% annualized rate—the most anemic recovery on record. Result: Both net and operating profits got worse each quarter.

After cars and computers, the industry that suffered the largest dollar decline in earnings was telecommunications, where profits were off almost \$3 billion from 1990. Most of that slide came from American Telephone & Telegraph, whose net income fell 83%, to \$522 million, because of—what else?—\$4.5 billion in restructuring charges and write-downs.

The profit swoon had a measureable effect on the rankings in BUSINESS WEEK's Top 25 earnings leaders. IBM, last year's top profit maker, vanished from the list. Stepping up as No. 1 was last year's runner-up, Exxon, whose 12% growth in net income, to \$5.6 billion, set a company record. But the new height had nothing to do with an increase in U.S. oil consumption: 75% of Exxon's profits came from overseas. And nearly all of its earnings increase occurred during the first quarter of 1991, when oil prices spiked to \$40 a barrel.

Exxon was followed by General Electric, Philip Morris, and two drug companies, Merck and Bristol-Myers Squibb. Energy and health care companies stacked the list with five each, and the Top 25 company with the biggest year-over-year profit gain was Johnson & Johnson, whose earnings jumped 28%.

ONE BIG WINNER. Among revenue leaders, the trend last year was down. GM, heading the field with sales of \$123 billion, was off 1% from the previous year. In second place was Exxon, with a 2% decline in sales, to \$104.2 billion. Third-ranked Ford and fourth-ranked IBM also saw sales fall, by 10% and 6%, respectively. Only fifth-ranked GE showed 3% growth, to \$60.2 billion, thanks to big increases at its financial-services units. The Top 25 company with the biggest revenue gain for the year was megaretailer Wal-Mart Stores, whose sales rose 35%, lifting profits to \$1.6 billion.

Wal-Mart wasn't the only lucky one. A

ES AND PROFITS

THE TOP 25 IN EARNINGS

	1991 profits Millions of dollars	Percent change from 1990	1990 rank
EXXON	\$5,600	12%	2
GENERAL ELECTRIC	4,435	3	3
PHILIP MORRIS	3,927	11	4
AMERISOURCE	2,122	19	10
BRISTOL-MYERS SQUIBB	2,056	18	11
JOHNSON & JOHNSON	1,921	0	8
WAL-MART STORES*	1,787	3	12
AMERISOURCE	1,618	17	20
WAL-MART STORES*	1,608	25	23
AMERISOURCE	1,567	13	18
AMERICAN INTL. GROUP	1,553	8	17
AMERISOURCE	1,529	-6	15
AMERISOURCE	1,507	-8	14
AMERISOURCE	1,461	28	24
AMERISOURCE	1,455	24	28
AMERISOURCE	1,403	-39	6
AMERICAN HOME PRODUCTS	1,375	12	26
AMERISOURCE	1,332	1	21
AMERISOURCE	1,315	17	29
AMERISOURCE	1,294	-11	16
AMERISOURCE	1,293	-40	7
AMERISOURCE	1,220	-36	9
AMERISOURCE	1,165	-7	25
AMERISOURCE	1,156	5	30
AMERISOURCE	1,154	-12	22

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.



Corporate Scoreboard

record year for the stock market propelled the financial-services group to the greatest dollar gain in profits for all industries, up \$2.2 billion, or 41%, over 1990. Merrill Lynch led the bullish pack with a 263% jump in profits, to \$696.1 million. By contrast, the previous year's top industry group, oil companies, saw earnings decline 17%. The prize for top percentage-rebounder among industries

went to the savings-and-loan group, whose profits soared 242.6% from a year earlier. True, the growth came off a low base, \$192.5 million in 1990. The industry was lifted by lower interest rates, which helped S&Ls boost margins on loans and rack up \$659.6 million in total profits.

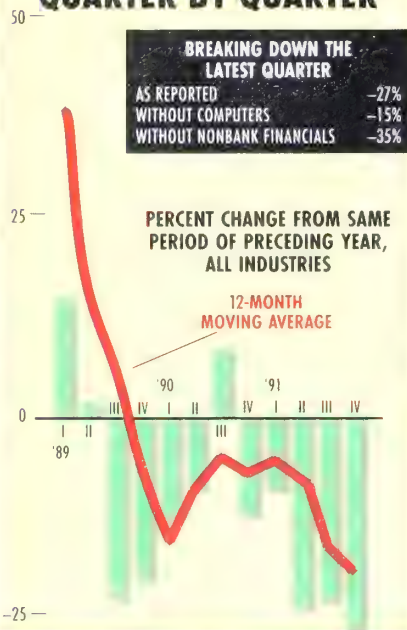
In nearly all industries, the big variable for 1992 is consumer demand. About 25% of all U.S. households say

they directly experienced some form of unemployment last year. This was reflected in last month's Conference Board survey of consumer confidence, which dipped to its lowest level since 1974. Still, most economists are calling for stronger GDP growth in the second half of this year. Maybe that will make it easier to forget nightmarish 1991.

By Bruce Hager in New York

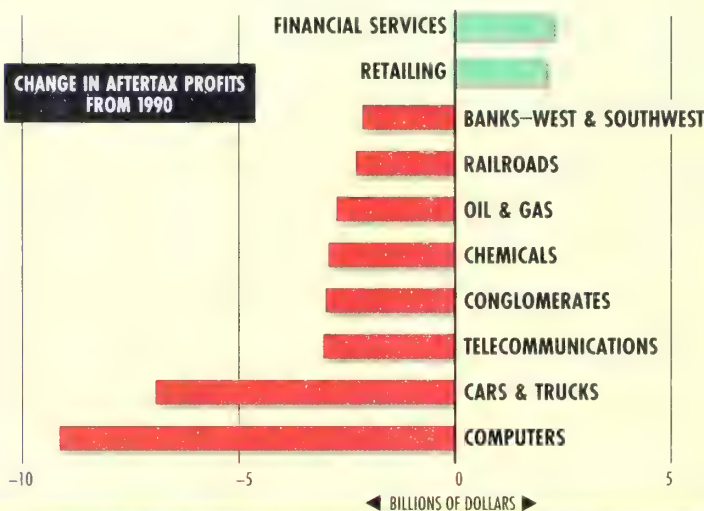
A SPOTLIGHT ON 1991 INDUSTRY PROFITS

AFTERTAX PROFITS, QUARTER BY QUARTER



INDUSTRIES WITH THE BIGGEST DOLLAR CHANGE IN 1991

Profits declined 19% in 1991, a swing of \$30 billion. Big percentage gains in savings and loans and tires just didn't produce the volume of money needed to counteract drastic losses in cars and computers



WINNERS AND LOSERS IN THE YEAR'S PROFIT RACE

THE WORST...

TOTAL 1991 LOSS

AUTO PARTS
FOREST PRODUCTS
BUILDING MATERIALS
RAILROADS
COMPUTERS
AIRLINES
CITEL
CARS & TRUCKS

ELECTRIC UTILITIES
OIL & GAS
DRUGS & RESEARCH
TELEPHONE COMPANIES
FINANCIAL SERVICES
INSURANCE
RETAILING
TIRE PROCESSING

...AND THE BEST

TOTAL 1991 PROFIT

← BILLIONS OF DOLLARS →

DATA: STANDARD & POOR'S COMPANET SERVICES INC.

CORPORATE SCOREBOARD

FOURTH QUARTER & FULL YEAR 1991

GLOSSARY

Sales: Includes all sales and other operating revenues. For banks, includes all operating revenues.

Profits: Net income before extraordinary items. For banks, profits are net income after security gains or losses.

Margins: Net income from continuing operations before extraordinary items as percent of sales

Return on common equity: Ratio of net income available for common stockholders (most recent 12 months) to latest available common equity, which includes common stock, capital surplus, and retained earnings.

Price-earnings ratio: Based on Feb. 21, 1992, common stock price and corporate earnings from continuing operations before extraordinary items for most recent 12-month period.

Earnings per share: For most recent 12-month period. Includes all common-stock equivalents.

COMPANY

SALES

PROFITS

MARGINS

RETURN ON
COMMON
EQUITY
12 MONTHS
ENDING
12/31

PRICE-
EARNINGS
RATIO
2/21

4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %	12 MONTHS ENDING 12/31	PRICE- EARNINGS RATIO 2/21	12 MONTHS' EARNINGS PER SHARE	
ALL-INDUSTRY COMPOSITE	1023259.2	-1	3920644.0	1	21493.8	-27	128695.4	-19	2.1	2.9	8.8	26	L60

AEROSPACE

4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %	12 MONTHS ENDING 12/31	PRICE- EARNINGS RATIO 2/21	12 MONTHS' EARNINGS PER SHARE	
INDUSTRY COMPOSITE	29496.0	5	109764.9	3	-197.6	NM	2497.2	-14	NM	0.7	9.3	15	2.88
Boeing	7753.0	11	29314.0	6	403.0	27	1567.0	13	5.2	4.5	19.7	10	4.56
Boeing Corp (1)	580.0	15	1993.0	12	16.0	0	32.0	-37	2.8	3.2	15.0	14	1.00
General Dynamics	2333.0	-3	8751.0	-7	66.0	NM	374.0	NM	2.8	NM	20.5	7	8.93
Lockheed Martin	1140.6**	2	4037.9	0	24.5	47	99.3	16	2.2	1.5	10.4	6	2.88
Boeing	2759.0	-7	9809.0	-2	103.0	4	308.0	-8	3.7	3.3	12.6	9	4.86
Boeing Martin Marietta	1670.4	7	6075.4	-1	44.0	-23	313.1	-4	2.6	3.7	17.4	8	6.30
Boeing McDonnell Douglas	4777.0**	18	18488.0	16	139.0	NM	355.0	32	2.9	NM	9.2	7	9.25
Boeing Northrop	1567.3	3	5694.2	4	158.5	271	268.2	27	10.1	2.8	23.8	5	5.69
Boeing	324.8	1	1389.1	19	8.8	91	34.7	117	2.7	1.4	7.7	9	1.98
Boeing Sundstrand	453.7	3	1669.2	4	49.0	48	108.8	-6	10.8	7.5	16.7	16	3.02
Boeing	328.9	10	1281.7	5	14.6	25	58.0	26	4.4	3.9	17.0	5	2.92
Boeing Technologies	5808.3**	-2	21262.5	-2	-1224.0	NM	-1020.9	NM	NM	2.8	-24.1	NM	-8.91

AUTOMOTIVE

4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %	12 MONTHS ENDING 12/31	PRICE- EARNINGS RATIO 2/21	12 MONTHS' EARNINGS PER SHARE	
INDUSTRY COMPOSITE	73842.1	3	279704.9	-5	-2723.6	NM	-7687.2	NM	NM	NM	-12.0	NM	-4.05
CARS & TRUCKS	65497.1	3	247034.0	-5	-2892.4	NM	-7910.0	NM	NM	NM	-13.8	NM	-5.17
Chrysler	8300.0**	9	29400.0	-4	97.0	213	-538.0	NM	1.2	0.4	-8.7	NM	-2.22
Ford Motor	21981.9	-9	88286.2	-10	-475.7	NM	-2258.0	NM	NM	NM	-10.0	NM	-4.79
General Motors	33604.4**	12	123055.8	-1	-2467.8	NM	-4992.0	NM	NM	NM	-18.2	NM	-8.85
Chrysler	817.0	-16	3460.0	-10	-67.0	NM	-165.0	NM	NM	NM	-58.4	NM	-0.77
Chrysler Truck (3)	153.7	92	493.1	13	1.9	NM	3.3	NM	1.3	NM	3.0	43	0.38
Chrysler	640.2	-12	2338.9	-16	19.2	233	39.7	-38	3.0	0.8	3.8	52	1.17

ARTS & EQUIPMENT

4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %	12 MONTHS ENDING 12/31	PRICE- EARNINGS RATIO 2/21	12 MONTHS' EARNINGS PER SHARE	
INDUSTRY COMPOSITE	5148.7	-2	20180.1	-6	18.4	NM	-10.8	NM	0.4	NM	-1.0	NM	-0.15
Arvin Industries	423.6	1	1676.4	-1	7.4	-26	22.0	-34	1.7	2.4	3.7	34	0.75
Arvin Industries	865.5	-4	3405.5	-2	-2.3	NM	-65.6	NM	NM	NM	-14.7	NM	-4.96
Arvin Industries	1181.2	-4	4591.1	-12	1.8	-56	13.5	-82	0.2	0.3	1.4	NM	0.33
Arvin Industries	153.7	-12	598.6	-14	2.4	36	-15.8	NM	1.6	1.0	NM	NM	-1.44
Arvin Industries	866.0	-1	3381.0	-7	28.0	-19	62.0	-63	3.2	4.0	5.4	39	1.84
Arvin Industries	416.7	-1	1681.3	2	13.1	18	43.6	-3	3.1	2.6	6.6	20	0.78
Arvin Industries	266.7	8	1098.7	14	-24.6	NM	-21.1	NM	NM	NM	-12.3	NM	-1.08
Arvin Industries	394.2	5	1467.0	-6	0.2	NM	-9.0	NM	0.1	NM	-5.8	NM	-0.31
Arvin Industries	223.3	8	879.7	-6	2.8	-59	5.0	-83	1.3	3.4	0.6	NM	0.20
Arvin Industries	157.3	8	616.7	7	5.2	NM	-12.1	NM	3.3	NM	-11.3	NM	-1.19
Arvin Industries	200.6	-13	784.2	-23	-15.7	NM	-33.4	NM	NM	0.1	-39.9	NM	-3.37

TIRE & RUBBER

4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %	12 MONTHS ENDING 12/31	PRICE- EARNINGS RATIO 2/21	12 MONTHS' EARNINGS PER SHARE	
INDUSTRY COMPOSITE	3196.3	0	12490.8	-2	150.4	177	233.5	118	4.7	1.7	8.6	33	2.03
Goodyear	162.1	-1	582.9	-1	25.6	10	79.6	1	15.8	14.3	29.4	22	5.72
Goodyear Tire & Rubber	254.0	19	1001.1	12	25.5	32	79.4	20	10.0	9.1	18.1	27	1.92
Goodyear Tire & Rubber	2780.2	-1	10906.8	-3	99.3	756	74.5	NM	3.6	0.4	3.7	52	1.24

Fourth quarter ended Nov. 30. (2) Fourth quarter ended Oct. 31. (3) First quarter and most recent 12 months ended Dec. 31. (4) First quarter and most recent 12 months ended Nov. (5) First quarter and most recent 12 months ended Oct. 31. (6) Second quarter and most recent 12 months ended Dec. 31. (7) Second quarter and most recent 12 months ended Nov. (8) Second quarter and most recent 12 months ended Oct. 31. (9) Third quarter and most recent 12 months ended Dec. 31. (10) Third quarter and most recent 12 months ended Nov. (11) Third quarter and most recent 12 months ended Oct. 31. (12) Fourth quarter ended Jan. 31. *Sales include excise taxes. **Sales include other income. ***Sales include excise taxes and other income. †Revenues from some major subsidiaries not included in sales. Earnings per share are for latest 12 months, not necessarily for end of most recent fiscal year. = not available. NM = not meaningful.

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12-31	PRICE- EARNINGS RATIO 2-21	12 MONTHS* EARNINGS PER SHARE
	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %			
3 BANKS													
INDUSTRY COMPOSITE	54065.4	-9	216797.6	-9	629.9	287	6814.4	-18	1.2	0.3	4.8	27	1.36
(a) BANKS - EAST GROUP COMPOSITE	28527.7	-10	113495.4	-12	424.3	NM	2517.3	53	1.5	NM	3.0	32	1.02
Bank of Boston	1288.3	-4	4547.1	-20	93.5	NM	-34.4	NM	7.3	NM	-3.4	NM	-0.64
Bank of New York	987.9	-24	4224.6	-21	65.9	1	122.0	-60	6.7	5.0	3.6	31	1.28
Bankers Trust New York	1656.0	-11	6844.0	-14	137.0	11	667.0	0	8.3	6.6	21.7	8	7.75
Chase Manhattan	2983.0	-14	11840.0	-13	135.0	-5	520.0	NM	4.5	4.1	10.0	8	3.12
Chemical Banking	3511.0	-9	14128.0	-11	-420.0	NM	154.0	-65	NM	0.1	-8.0	NM	0.11
Citicorp	8247.0	-12	31839.0	-17	-133.0	NM	-914.0	NM	NM	NM	-14.8	NM	-3.22
First Fidelity Bancorporation	682.8	-9	2777.6	-10	57.8	9	221.2	NM	8.5	7.0	11.9	10	3.37
Fleet/Norstar Financial Group	1310.4	41	4438.9	10	35.2	NM	97.7	NM	2.7	NM	3.9	43	0.67
KeyCorp	584.4	12	2282.7	27	53.1	41	188.1	27	9.1	7.2	14.1	13	3.86
Mellon Bank	789.0	-4	3151.0	-9	72.0	NM	280.0	61	9.1	NM	14.0	9	4.66
Meridian Bancorp	287.3	-12	966.0	-24	24.2	23	107.1	121	8.4	6.0	13.5	9	2.56
Midlantic	460.6	-22	1986.7	-20	-81.3	NM	-543.3	NM	NM	NM	-80.6	NM	-14.36
MNC Financial	398.1	-49	2194.3	-32	-82.4	NM	-70.2	NM	NM	NM	-7.1	NM	-0.89
Morgan (J. P.)	2499.0	-5	10314.0	-2	269.0	41	1114.0	44	10.8	7.3	19.6	10	5.63
PNC Financial	1015.6	-15	4469.6	-8	100.6	NM	389.8	450	9.9	NM	11.7	12	3.95
Republic New York	609.4	-20	2535.3	-9	58.2	18	227.4	13	9.6	6.5	13.3	11	3.95
Shawmut National	576.6	-11	2343.6	-15	2.4	NM	-170.7	NM	0.4	NM	-17.2	NM	-2.35
State Street Boston	335.4	-6	1357.9	3	28.2	-10	139.3	19	8.4	8.8	17.1	17	3.72
UJB Financial	305.9	-9	1255.2	-7	8.8	NM	22.4	NM	2.9	NM	2.6	39	0.45
(b) BANKS - MIDWEST GROUP COMPOSITE	9115.0	-4	35979.8	-4	658.8	33	2749.6	12	7.2	5.2	11.4	15	2.49
AmeriTrust	260.9	-18	1119.2	-13	-127.9	NM	-86.5	NM	NM	NM	-15.5	NM	-2.48
Banc One	1298.7	38	4154.1	18	144.3	33	529.5	25	11.1	11.6	16.4	16	2.91
Boatmen's Bancshares America	399.9	2	1587.5	5	38.8	11	150.1	11	9.7	9.0	11.2	11	4.07
	350.2	-4	1401.5	2	41.9	29	153.4	12	12.0	9.0	14.8	12	5.04
Continental Bank	551.0	-23	2301.0	-25	50.0	56	-73.0	NM	9.1	4.5	-9.7	NM	-2.03
First Bank System	450.9	-12	1821.3	-15	54.2	47	190.4	46	12.0	7.2	14.5	13	2.13
First Chicago	1163.4	-16	4829.8	-15	-15.1	NM	116.3	-53	NM	4.1	3.3	27	1.15
First of America Bank	359.9	-3	1434.0	3	36.2	7	134.9	2	10.1	9.1	13.2	9	3.32
Firststar	315.3	-2	1254.2	1	35.5	30	134.3	14	11.2	8.5	14.2	12	4.27
Huntington Bancshares	304.6	-4	1219.4	-3	31.7	16	117.0	37	10.4	8.6	14.0	11	1.90
Manufacturers National	281.5	-8	1159.7	0	32.2	7	120.2	11	11.4	9.9	14.8	12	3.81
Michigan National	271.0	-12	1096.6	-11	18.6	605	50.1	4	6.9	0.9	6.7	14	3.36
National City	625.9	-7	2587.9	-4	63.4	74	231.0	-1	10.1	5.4	12.7	11	3.62
NBD Bancorp	670.6	-7	2723.8	-3	77.5	6	293.0	1	11.6	10.1	14.7	12	2.49
Northern Trust	307.4	-11	1260.2	-5	33.1	8	127.4	10	10.8	8.9	18.1	15	3.43
Norwest	1109.3	4	4420.3	7	108.9	NM	398.5	260	9.8	NM	17.5	13	2.95
Society	394.7	-9	1609.2	-6	35.5	-6	163.0	5	9.0	8.7	14.9	12	4.90
(c) BANKS - SOUTH & SOUTHEAST GROUP COMPOSITE	7102.7	-4	28206.5	-1	-105.0	NM	1252.7	-29	NM	3.4	6.4	24	1.74
Barnett Banks	789.8	-5	3274.0	0	39.3	NM	123.8	85	5.0	NM	6.5	20	1.71
Crestar Financial	291.0	-12	1213.0	-4	7.3	696	33.8	-45	2.5	0.3	4.2	26	0.98
First Union	1207.8	14	4321.2	6	88.9	60	318.7	5	7.4	5.2	10.6	15	2.55
NationsBank	2887.5	-7	11594.1	-3	-243.8	NM	201.9	-66	NM	1.2	4.6	60	0.76
Signet Banking	352.0	0	1305.3	-9	-51.7	NM	-25.7	NM	NM	1.9	-3.6	NM	-0.95
SunTrust Banks	821.4	-6	3360.6	-1	95.5	11	370.7	6	11.6	9.8	14.8	13	2.90
Wachovia	753.2	-10	3138.3	-2	-40.6	NM	229.5	-34	NM	10.1	-2.0	22	2.68
(d) BANKS - WEST & SOUTHWEST GROUP COMPOSITE	9320.0	-12	39115.9	-7	-348.2	NM	294.7	-88	NM	0.5	0.5	NM	0.16
Bancorp Hawaii	252.9	-6	1022.8	7	30.1	19	112.7	18	11.9	9.5	16.1	13	4.04
BankAmerica	3053.0	-6	12268.0	0	285.0	34	1124.0	28	9.3	6.5	15.8	9	4.81
First City Bancorporation of Texas	305.2	-4	1143.9	-23	-35.9	NM	-224.8	NM	NM	NM	-73.2	NM	-13.35
First Interstate Bancorp	1156.4	-20	5119.7	-15	-60.0	NM	-288.1	NM	NM	6.3	-16.0	NM	-5.24
Security Pacific	1942.4	-24	8921.6	-14	-409.2	NM	-774.5	NM	NM	NM	-22.6	NM	-6.37
U. S. Bancorp	503.3	-4	2014.0	0	53.5	14	196.4	3	10.6	9.0	13.9	12	2.01
Union Bank	390.8	-10	1632.7	-3	17.2	-55	93.5	-36	4.4	8.8	9.2	9	2.64
Valley National	294.9	2	1132.4	-1	2.1	3	34.6	361	0.7	0.7	6.6	19	1.72
Wells Fargo	1421.0	-7	5861.0	-2	-231.0	NM	21.0	-97	NM	10.3	0.1	NM	0.04
4 CHEMICALS													
INDUSTRY COMPOSITE	32695.2	-9	131972.3	-3	255.5	-83	5244.2	-35	0.8	4.3	9.3	23	1.98
Air Products & Chemicals (3)	760.5	5	2967.0	0	64.2	6	252.5	5	8.4	8.4	13.0	19	4.50
American Cyanamid	1134.9	0	4986.2	9	65.9	17	358.8	233	5.8	5.0	13.6	16	3.85
Arco Chemical	747.0	-2	2837.0	0	68.0	0	188.0	-39	9.1	9.0	11.4	20	1.96
Betz Laboratories	165.6	9	665.6	12	18.6	16	75.5	15	11.2	10.5	27.6	26	2.47

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CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12/31	PRICE EARNINGS RATIO 2/21	12 MONTHS' EARNINGS PER SHARE
	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %			
Abbot (3)	384.8	-4	1466.5	-7	16.6	21	42.7	6	4.3	3.4	11.1	20	1.93
Acetex	236.0	2	937.7	3	-10.6	NM	-7.1	NM	NM	4.1	-2.3	NM	-0.29
Alkermes Chemical	4563.0**	-11	18807.0	-5	-92.0	NM	942.0	-32	NM	5.3	9.7	16	3.46
Am Pont	9765.0***	-12	38695.0	-3	-240.0	NM	1403.0	-39	NM	4.2	8.2	23	2.08
Angelhard	586.8**	-11	2436.4	-17	22.8	6	87.9	25	3.9	3.3	11.6	18	1.96
Amly	659.7	-2	2574.9	2	48.3	-27	206.7	-11	7.3	9.8	16.9	14	1.75
Amro	265.2	-6	1056.9	-6	12.3	NM	4.8	-75	4.6	NM	0.7	NM	0.08
Amreport-McMoRan	369.3	-5	1579.2	0	12.9	-4	96.7	-69	3.5	3.4	16.5	32	1.37
Amiller (H. B.) (1)	220.6	9	852.9	8	8.8	9	27.7	31	4.0	4.0	13.3	23	3.00
Amorgia Gulf	182.3	-20	838.3	-10	12.1	-36	61.5	-36	6.7	8.3	NM	16	1.75
Amodrich (B. F.)	607.4	5	2471.6	2	-106.7	NM	-80.6	NM	NM	2.4	-7.3	NM	-3.50
Amace (W. R.)	1613.3	-6	6049.1	1	79.1	9	219.2	8	4.9	4.2	11.4	18	2.50
Ameat Lakes Chemical	321.9	11	1307.6	23	39.7	8	157.5	12	12.3	12.6	18.8	25	2.23
Amanna (M. A.)	302.2**	12	1148.2	3	0.7	-91	-16.7	NM	0.2	2.9	-4.7	NM	-0.75
Amrcules	709.7	-14	2928.9	-8	34.1	NM	94.9	-1	4.8	0.3	5.0	25	2.01
AmC Fertilizer Group (6)	252.6	-9	1100.0	-3	22.1	-11	90.0	2	8.8	9.0	12.2	16	3.95
Amctite	141.5	-1	561.2	1	18.0	10	71.9	7	12.7	11.4	21.2	25	1.98
Ambrizol	370.3	0	1476.3	2	31.9	1	123.7	-35	8.6	8.5	15.6	18	3.57
Amndell Petrochemical	1354.0	-32	5729.0	-12	21.0	-71	222.0	-38	1.6	3.7	182.0	9	2.78
Amnsanto	2126.0	-3	8864.0	-1	66.0	113	296.0	-46	3.1	1.4	7.5	29	2.33
Amorton International (6)	508.4	8	1966.6	9	34.8	16	143.4	3	6.8	6.4	12.3	21	2.94
Amalco Chemical	334.6	16	1237.3	16	36.9	6	134.6	6	11.0	12.2	25.0	19	1.78
Am Industries	195.6	-14	840.3	-7	-6.9	NM	-24.1	NM	NM	4.6	NM	NM	-0.40
Amn	594.7	-7	2275.4	-12	10.2	28	-12.7	NM	1.7	1.3	-3.6	NM	-0.92
Amantum Chemical	636.7*	-17	2532.4	-5	-17.6	NM	-123.3	NM	NM	1.3	NM	NM	-4.26
Amhm & Haas	658.3	-3	2763.0	-2	29.5	-20	163.1	-21	4.5	5.4	12.4	20	2.45
Amhulman (A.) (4)	186.5	-13	707.7	-3	9.3	-4	42.0	10	5.0	4.5	16.7	23	1.43
Amion Carbide	1151.0	-15	4877.0	-7	-87.0	NM	-116.0	NM	NM	NM	-6.0	NM	-1.06
Amellman	199.2	-3	805.7	-3	13.1	15	45.3	-26	6.6	5.6	10.9	21	1.39
Amico	390.5	-6	1630.5	0	19.5	85	73.5	8	5.0	2.6	12.2	14	3.21

CONGLOMERATES

INDUSTRY COMPOSITE	47123.9	-1	176369.5	0	1377.0	-35	5536.6	-34	2.9	4.5	11.4	22	2.21
Amco Standard (3)	1206.4**	4	4807.1	3	21.0	22	91.7	18	1.7	1.5	10.9	19	2.03
Amied-Signal	3004.0	-4	11831.0	-4	115.0	7	-273.0	NM	3.8	3.4	-9.2	NM	-2.00
Amitec Industries	340.4	-6	1373.0	-8	19.3	-16	83.2	-30	5.7	6.4	NM	NA	NA
Amrt Group (11)	285.8	5	1152.2	10	0.5	-82	2.5	-80	0.2	0.9	0.9	52	1.37
Amal	848.9	-2	3568.6	1	32.0	13	122.4	5	3.8	3.3	11.1	16	3.04
Amgie International	332.2	-7	1243.5	-9	12.3	43	30.1	-24	3.7	2.4	8.3	12	1.72
Amqua Industries	242.1	3	924.6	-5	-26.8	NM	-50.8	NM	NM	NM	-19.4	NM	-3.08
Amneral Cinema (2)	797.9**	0	3587.8	1	-283.1	NM	-293.1	NM	NM	1.6	-65.2	NM	-3.88
Amneral Electric	17551.0**	2	60236.0	3	1263.0	2	4435.0	3	7.2	7.2	21.2	16	5.10
Amsehousehold International	1160.7	2	4593.9	6	-33.9	NM	149.8	-36	NM	6.4	7.7	17	3.15
AmV	5350.0	-2	20421.0	-1	195.0	9	817.0	-23	3.6	3.3	9.8	10	6.42
AmV	1517.0	-6	5986.4	-2	-8.5	NM	74.1	5	NM	NM	NM	2	0.43
Amnational Intergroup (9)	871.5	7	3262.0	8	3.7	47	-18.4	NM	0.4	0.3	-5.8	NM	-1.09
Amniden	408.6	7	1567.6	1	15.3	NM	57.6	-1	3.7	NM	11.8	17	1.33
Amnn Central	425.9	50	1669.4	54	-2.0	NM	63.4	-15	NM	6.7	4.0	20	1.30
Amremark International	784.7	3	2815.7	3	47.6	71	102.3	97	6.1	3.6	13.2	15	3.25
Amckwell International (3)	2560.4	-13	11549.0	-7	123.3	-13	582.3	-6	4.8	4.8	13.8	11	2.51
Amledyne	818.2	-7	3206.8	-7	28.1	NM	-25.4	NM	3.4	0.1	-5.6	NM	-0.46
Amnneco	3643.0	-6	13662.0	-6	-18.0	NM	-674.0	NM	NM	3.4	-30.9	NM	-5.62
Amxtron	2016.0	-6	7840.1	-1	83.3	7	299.5	6	4.1	3.6	10.5	10	3.42
AmW	2122.0	3	7913.0	-3	-231.0	NM	-140.0	NM	NM	2.0	-7.3	NM	-2.30
Amilhi	186.4	-9	765.7	0	-2.5	NM	20.1	-73	NM	6.5	5.2	36	0.18
Amhitman	650.9	5	2393.3	4	23.4	-7	80.4	NM	3.6	4.1	17.8	19	0.76

CONSUMER PRODUCTS

INDUSTRY COMPOSITE	59089.2	4	225824.5	7	3201.9	17	13645.9	13	5.4	4.8	21.5	22	2.13
AmFARREL	4740.6	12	18305.0	11	263.6	39	1031.8	22	5.6	4.5	19.2	17	2.27
Amown Group (11)	454.9	0	1730.6	-4	7.0	-30	23.3	-33	1.5	2.2	7.0	19	1.37
Amartmarx (1)	318.9	-5	1215.3	-6	-15.1	NM	-38.4	NM	NM	NM	-12.6	NM	-1.74
Amillwood (8)	240.6	12	856.3	11	5.8	186	18.7	345	2.4	1.0	8.9	20	1.58
Amalie Fay	171.4	-15	836.6	-3	0.6	-81	29.4	1	0.3	1.4	13.6	13	1.55
Amclaiborne	530.7	13	2007.2	16	56.5	2	222.7	8	10.7	11.9	25.3	15	2.61
Amke (7)	743.4	15	3211.8	20	61.5	6	305.3	6	8.3	9.0	25.5	17	3.99
Amxford Industries (7)	142.6	3	502.8	-5	3.7	248	9.6	195	2.6	0.8	9.2	18	1.09
Amillips-Van Heusen (11)	286.3	19	890.4	15	17.5	18	27.8	17	6.1	6.2	25.5	23	1.00
Amebok International	586.6	20	2734.5	27	49.7	26	234.7	33	8.5	8.1	30.6	15	2.37
Amssell	256.7	32	804.6	13	26.4	34	56.8	-16	10.3	10.2	11.8	27	1.38
Am	850.3	24	2952.4	13	48.4	NM	161.3	99	5.7	NM	19.1	16	2.75
Amarnaco Group	158.3	2	562.5	3	1.5	NM	-19.5	NM	0.9	NM	NM	NA	NA

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CORPORATE SCOREBOARD

COMPANY

SALES

PROFITS

MARGINS

RETURN ON
COMMON
EQUITY
12 MONTHS
ENDING
12-31

PRICE-
EARNINGS
RATIO
2-21

12
MONTHS'
EARNINGS
PER
SHARE

4TH
QUARTER
1991
\$ MIL

CHANGE
FROM
1990
%

12
MONTHS
1991
\$ MIL

CHANGE
FROM
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4TH
QUARTER
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4TH
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4TH
QUARTER
1990
%

12 MONTHS
ENDING
12-31

PRICE-
EARNINGS
RATIO
2-21

12
MONTHS'
EARNINGS
PER
SHARE

(b) APPLIANCES & HOME FURNISHINGS

GROUP COMPOSITE	6633.8	6	25623.3	2	76.2	NM	414.5	-15	1.1	NM	6.2	41	0.62
Armstrong World Industries	583.0	-3	2439.3	-3	-2.6	NM	60.6	-59	NM	1.2	6.5	27	1.11
Best Buy (10)	230.6	35	805.5	25	2.3	78	8.1	28	1.0	0.8	5.3	24	0.94
Circuit City Stores (10)	694.0	19	2628.1	13	8.8	248	60.9	-8	1.3	0.4	15.2	24	1.31
Good Guys (3)	155.0	25	457.2	38	4.6	-7	10.6	22	3.0	4.0	11.9	25	0.87
Interco (10)	392.2	7	1443.6	-2	-7.1	NM	-91.6	NM	NM	NM	NM	NM	-2.97
InterTan (6)	208.9	-8	670.8	-8	5.0	-6	8.6	-30	2.4	2.4	3.5	23	0.99
Kimball International (6)	148.2	3	553.1	-6	8.1	0	29.9	-24	5.5	5.6	9.8	19	1.40
La-Z-Boy Chair (8)	165.3	-1	613.1	1	8.5	-5	26.0	0	5.1	5.4	11.0	18	1.44
Leggett & Platt	256.6	-1	1081.8	-1	10.1	NM	39.4	34	3.9	NM	12.2	21	2.22
Masco	806.0	5	3141.0	-2	-27.7	NM	44.9	-68	NM	NM	2.5	92	0.30
Maytag	725.6	0	2970.6	-3	21.0	62	79.0	-20	2.9	1.8	7.8	25	0.75
Pier 1 Imports (10)	158.4	9	727.5	28	4.7	NM	19.7	37	3.0	NM	11.3	21	0.53
Whirlpool	1711.0	6	6770.0	2	40.0	NM	170.0	136	2.3	NM	11.4	19	2.45
Zenith Electronics	399.0	6	1321.6	-6	0.5	NM	-51.6	NM	0.1	NM	-17.0	NM	-1.79

(c) BEVERAGES

GROUP COMPOSITE	13294.1	7	49583.2	8	693.6	-6	3725.1	4	5.2	6.0	21.9	27	1.92
Anheuser-Busch	2666.2	-1	10996.3	2	159.2	12	939.8	12	6.0	5.3	21.8	17	3.26
Brown-Forman (8)	452.9*	17	1439.2	8	52.7	20	145.6	7	11.6	11.3	21.0	16	5.25
Coca-Cola	2879.0	13	11571.6	13	358.4	22	1618.0	17	12.4	11.5	38.3	33	2.43
Coca-Cola Enterprises	947.9	1	4050.8	0	-125.0	NM	-82.4	NM	NM	1.2	-6.5	NM	-0.79
Coors (Adolph)	418.3	5	1917.4	4	-22.8	NM	23.9	-39	NM	NM	2.1	28	0.64
PepsiCo	5929.8	9	19607.9	10	271.1	2	1080.2	-1	4.6	4.9	20.8	24	1.35

(d) PERSONAL CARE

GROUP COMPOSITE	13151.3	8	49206.8	8	916.8	6	2993.8	-5	7.0	7.1	24.3	23	2.99
Alberto-Culver (3)	246.6	29	929.5	15	9.4	17	31.5	-14	3.8	4.2	12.1	23	1.11
Avon Products	1129.6	0	3593.3	4	92.6	5	210.7	8	8.2	7.8	76.5	16	2.92
Clorox (6)	351.6	5	1678.7	8	25.4	24	62.2	-56	7.2	6.1	7.6	41	1.15
Colgate-Palmolive	1575.7	7	6060.3	6	86.9	18	124.9	-61	5.5	5.0	11.6	60	0.77
Gillette	1342.4	8	4683.9	8	114.3	7	427.4	16	8.5	8.6	41.6	25	1.94
Helene Curtis Industries (10)	228.6	12	975.2	20	3.4	63	15.3	57	1.5	1.0	9.6	24	1.63
International Flavors & Fragrances	225.7	3	1017.0	6	30.4	5	168.7	8	13.5	13.2	18.3	23	4.41
NCH (8)	160.8	-5	669.0	1	10.7	-7	42.1	0	6.7	6.8	16.6	13	5.11
Procter & Gamble (6)	7507.0	9	28229.0	9	523.0	7	1787.0	3	7.0	7.1	25.4	21	4.98
Stanhome	209.4	2	710.2	5	16.9	-10	45.1	-12	8.1	9.1	20.2	15	2.21
Tambrands	173.9	15	660.7	5	3.9	-78	79.0	-19	2.2	12.0	31.5	34	1.92

(e) TOBACCO

GROUP COMPOSITE	21269.5	-1	83106.2	7	1251.8	21	5480.8	39	5.9	4.8	24.4	18	2.31
American Brands	3796.4*	1	14063.8	2	216.6	NM	806.1	37	5.7	0.2	20.0	11	3.91
Dibrell Brothers (6)	299.9	-1	1058.9	21	7.2	20	24.5	45	2.4	2.0	24.3	19	1.85
Philip Morris	11789.0	-4	48064.0	8	767.0	-13	3927.0	11	6.5	7.1	31.4	18	4.24
RJR Nabisco Holdings	3976.0	8	14989.0	8	161.0	160	368.0	NM	4.1	1.7	4.7	45	0.22
Standard Commercial (9)	298.5	-3	1116.8	8	4.8	69	19.1	133	1.6	0.9	14.4	13	2.32
Universal (6)	874.2**	-4	2906.5	4	28.9	10	70.2	79	3.3	2.9	24.1	13	2.24
UST	235.5*	17	907.3	19	66.3	21	265.9	19	28.1	27.2	56.1	24	1.18

7 CONTAINERS & PACKAGING

INDUSTRY COMPOSITE	5926.0	2	23683.5	6	28.4	-67	343.1	-50	0.5	1.5	5.1	44	0.82
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(a) GLASS, METAL & PLASTIC

GROUP COMPOSITE	2438.7	11	10164.1	18	9.8	NM	201.2	71	0.4	NM	13.9	22	1.92
Ball	537.4	78	2267.4	67	9.0	543	66.2	32	1.7	0.5	11.5	15	2.42
Constar International	144.3	12	548.2	9	5.8	56	16.8	24	4.1	2.9	11.4	18	2.24
Crown Cork & Seal	874.5**	3	3807.4	24	25.8	21	128.1	20	3.0	2.5	12.4	20	4.43
Owens-Illinois	882.5	-4	3541.1	-3	-30.9	NM	-10.0	NM	NM	NM	NM	NM	-0.25

(b) PAPER

GROUP COMPOSITE	3487.3	-3	13519.4	-2	18.6	-85	141.9	-75	0.5	3.5	2.7	74	0.45
Bemis	290.9	-4	1141.6	1	18.0	17	53.0	4	6.2	5.1	17.1	23	2.06
Federal Paper Board	411.0	-7	1435.0	4	5.7	-75	82.4	-30	1.4	5.2	8.4	17	1.83
Gaylord Container (3)	168.9	-7	710.3	-1	-23.8	NM	-194.2	NM	NM	NM	NM	NM	-12.57
Longview Fibre (2)	172.2	6	644.0	6	7.4	-49	16.6	-73	4.3	7.9	4.4	50	0.32
Sonoco Products	446.4	4	1697.1	2	24.5	-9	94.8	88	5.5	6.3	17.5	18	2.20
Stone Container	1357.5	-6	5384.3	-6	-36.8	NM	-49.1	NM	NM	0.7	-3.5	NM	-0.79
Temple-Inland	640.4	4	2507.1	4	23.7	-51	138.4	-40	3.7	7.8	9.1	21	2.51

8 DISCOUNT & FASHION RETAILING

INDUSTRY COMPOSITE	79693.0	9	304239.1	8	1892.7	12	6655.2	45	2.4	2.3	12.2	27	1.39
Ames Department Stores (11)	673.1	-4	2948.8	-17	-196.3	NM	-317.3	NM	NM	NM	NM	NM	-8.80
AutoZone (4)	215.8	30	868.3	25	12.6	70	49.2	82	5.8	4.5	21.8	56	0.70
Burlington Coat Factory (6)	416.2	7	952.9	11	34.3	28	32.3	102	8.2	6.9	11.8	12	1.82
Caldor (11)	417.9	5	1836.9	NA	-3.9	NM	2.5	NA	NM	NM	1.8	32	0.55

Footnotes on page 67

**Who's behind the
finest breakthrough in the
history of fashion?**





Amoco Chemical. Providing the raw material for the fashion fiber of the future: microfiber.

Microfiber, a revolutionary new advance in fiber technology, is transforming the way fashion designers look at natural fibers. And changing our current perceptions of polyester, the filament used in most microfiber blends. Fact is, this small wonder is having the biggest impact on

the fashion industry in a generation. Microfiber is finer than any textile fiber found in nature, finer even than the finest silks.

Helping to propel this leading-edge development is Amoco Chemical with our purified terephthalic acid (PTA), a key raw material for making polyester microfiber.

Microfiber has natural advantages.

What makes microfiber such a natural choice? The individual filaments of the fiber that measure less than one denier.

Textile manufacturers can now pack more filaments than ever before into the yarn. The more filaments, the more luxurious the feel, the more flexible and



Amoco Chemical Company

Microfiber has real strengths, too.

better performance the fiber will have.

Fabrics of polyester microfibers can be woven to have a buttery softness like velvet or washed silk. They also provide what the textile trade calls "good drape." They're lighter and softer than most other fabrics.

The tightly woven polyester filaments in microfiber fabrics resist water better than any natural fiber. At the same time, this tight weave retains excellent breathability, making microfiber fabrics ideal for ski wear and other high-performance outerwear.

Microfiber also builds on the strengths of traditional polyester. It's easy to care for, durable and wrinkle-resistant. Which means it's one fabric we can all take great comfort in. It's no wonder microfiber yarns are making polyester fashionable like never before.

You've never felt anything like it.

No fiber in nature offers the feel, wear and look of polyester microfibers. It brings softness, a silkiness, almost a sensual quality to everything it touches. From the finest men's and women's suits to designer rainwear and outerwear.

Soon, microfibers will touch all of us, setting a new standard of fashion perfection. Just as Amoco Chemical Company is today setting new standards of quality in the development and processing of raw materials. In the case of the raw material purified terephthalic acid (PTA) used in making microfibers, Amoco has elevated its purity to the world-class level microfiber manufacturers require. Because at Amoco Chemical, we know providing anything less simply wouldn't feel right.

High-quality PTA is just one of the more than \$4 billion of quality petrochemical products that Amoco Chemical makes each year. And customer satisfaction is our major concern.

For more information on how Amoco has helped companies produce other successful products, write Amoco Chemical Company, Department M401, 200 East Randolph Drive, MC4106, Chicago, Illinois 60601-7125. Or call us at 1-800-621-0626, ext. 401.



Amoco Chemical Company

The chemistry's right at Amoco.

Fabric swatch courtesy of Milliken & Company, using Hoechst Celanese "Tevira" Micronesse® yarns.

Supplied by: Falke, Kikit, Tanner, ABS, Feiss, Pierre Cardin, Pallesco by & Marx, Bill Blass, K.C. Kooper, Sanyo, Azzura, Mary McFadden, Beach.

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12-31	PRICE- EARNINGS RATIO 2-21	12 MONTHS' EARNINGS PER SHARE
	4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %			
Arter Hawley Hale Stores (11)	508.7**	-10	2186.9	-21	-17.0	NM	-132.6	NM	NM	NM	NM	NM	-4.60
Charming Shoppes (11)	247.0	13	982.2	13	11.8	38	53.1	46	4.8	3.9	15.8	28	1.01
Consolidated Stores (11)	171.8	3	719.7	7	1.8	291	10.2	NM	1.1	0.3	6.6	61	0.22
Costco Wholesale (4)	1429.9	28	5614.0	27	20.5	49	91.5	63	1.4	1.2	12.9	49	1.16
Dayton Hudson (11)	3955.0**	9	15731.0	10	35.0	-40	344.0	-19	0.9	1.6	15.4	15	4.47
illard Department Stores (11)	991.0**	10	4074.6	13	39.0	21	205.2	17	3.9	3.6	13.8	23	5.52
ollar General (11)	189.7	15	713.2	11	4.3	55	18.1	40	2.3	1.7	13.1	32	0.89
ison Brothers Stores (11)	329.4	6	1366.6	14	11.6	3	61.3	1	3.5	3.6	17.0	13	2.87
amily Dollar Stores (4)	263.9	17	1028.5	15	11.6	49	44.1	44	4.4	3.5	18.7	23	0.80
ederated Department Stores (11)	1137.1**	0	4572.4	-3	-30.1	NM	-187.7	NM	NM	NM	NM	NA	NA
ingerhut	498.7	3	1428.4	14	27.0	14	53.6	12	5.4	4.9	15.7	17	2.14
ap (11)	702.1	40	2340.1	26	70.8	48	202.4	66	10.1	9.5	34.5	34	1.43
rossman's	179.5	-2	806.6	-1	-1.4	NM	6.5	NM	NM	NM	5.5	20	0.25
echinger (11)	400.6	15	1558.9	12	6.5	33	26.7	-18	1.6	1.4	5.3	20	0.69
ills Department Stores (11)	438.8	-21	1802.8	-18	10.9	NM	-253.9	NM	2.5	NM	NM	NM	-13.39
ome Depot (11)	1298.3	39	4845.5	38	58.4	62	223.0	47	4.5	3.9	13.9	55	1.12
ome Shopping Network (4)	291.8	0	1078.6	3	13.1	9	-8.5	NM	4.5	4.1	-4.8	NM	-0.09
amesway (11)	219.3	1	876.0	-4	0.4	NM	-19.7	NM	0.2	NM	-17.9	NM	-1.43
mart (11)	8050.0**	6	34155.0	5	110.0	4	782.0	134	1.4	1.4	14.1	13	3.84
ands' End (11)	164.0	13	641.3	11	5.8	NM	23.4	44	3.5	0.2	20.8	28	1.22
imited (11)	1433.4**	15	5836.8	15	72.9	-14	375.1	-1	5.1	6.8	22.1	28	1.04
owe's (11)	790.3	12	2932.7	3	13.0	-8	54.8	-28	1.6	2.0	7.7	29	1.50
acy (R. H.) (5)	1601.3**	4	6816.8	-4	-155.4	NM	-351.3	NM	NM	NM	NM	NA	-238.01
ay Department Stores (11)	2561.0**	8	10537.0	5	91.0	1	501.0	-6	3.6	3.8	22.2	15	3.90
elville	3254.7	5	9886.2	14	233.6	-1	346.7	-10	7.2	7.6	21.9	16	3.20
mercantile Stores (11)	583.0**	2	2433.5	3	30.5	-9	117.6	-11	5.2	5.9	9.7	13	3.20
erry-Go-Round Enterprises (11)	197.0	22	731.9	24	9.6	-16	39.2	13	4.9	7.1	19.7	16	0.75
eyer (Fred) (11)	604.0	11	2655.5	7	5.5	70	40.6	NM	0.9	0.6	13.0	16	1.64
leiman Marcus Group (5)	434.2**	2	1752.9	2	8.3	-20	7.3	-73	1.9	2.4	NM	NM	-0.54
ordstrom (11)	687.1	8	3104.0	9	19.4	-5	141.3	40	2.8	3.2	15.6	22	1.73
amida Holdings (11)	156.7	-2	667.3	3	0.4	-14	-1.9	NM	0.3	0.3	-41.2	NM	-0.49
ayless Cashways (1)	644.1	9	2387.2	7	0.5	NM	-13.3	NM	0.1	NM	NM	NA	-2.63
enney (J. C.) (11)	4200.0	-1	17170.0	-1	116.0	-13	433.0	-41	2.8	3.2	10.7	17	3.41
ep Boys-Manny, Moe & Jack (11)	261.2	16	970.6	9	10.7	30	36.0	-9	4.1	3.7	9.7	32	0.64
etrie Stores (11)	305.5	5	1343.2	4	-4.3	NM	8.0	-67	NM	NM	1.3	NM	0.17
rice (4)	2513.6**	14	7056.2	22	50.3	7	137.4	7	2.0	2.1	16.8	19	2.73
VC Network (11)	248.8	21	890.2	10	5.7	NM	19.6	NM	2.3	NM	6.3	23	0.86
ose's Stores (11)	315.5	-6	1423.8	-7	-2.5	NM	-34.4	NM	NM	NM	-21.6	NM	-1.85
oss Stores (11)	215.4	16	896.9	15	3.3	NM	23.9	9	1.5	0.1	16.8	20	1.01
ears, Roebuck	15968.4**	3	57242.4	2	552.6	46	1144.9	28	3.5	2.4	8.7	13	3.32
ervice Merchandise	1387.8	-1	3399.8	-1	88.7	8	76.1	25	6.4	5.9	499.3	12	1.14
hopKo Stores (10)	397.4	3	1586.5	NA	14.3	1	49.2	NA	3.6	3.7	16.3	11	1.54
iepel	713.1	-8	1976.3	-1	13.0	-64	16.9	-73	1.8	4.6	3.8	45	0.33
trawbridge & Clothier (11)	211.9**	-9	954.9	-5	-1.5	NM	9.1	-69	NM	0.7	3.9	25	0.97
UX (11)	705.3	9	2672.1	14	27.4	-8	71.4	-2	3.9	4.6	23.5	17	1.02
ys 'R' Us (11)	1181.7	12	5812.1	10	32.1	12	315.5	-4	2.7	2.7	14.6	34	1.07
. S. Shoe (11)	678.6	1	2736.9	-1	8.7	-5	-28.8	NM	1.3	1.4	-5.7	NM	-0.64
alue City Department Stores (5)	161.9	21	625.8	NA	6.9	36	37.2	NA	4.3	3.8	31.4	17	1.23
enture Stores (11)	346.7**	3	1480.0	4	5.4	35	39.5	17	1.6	1.2	40.4	13	2.35
ahan (11)	693.8	14	2681.5	15	5.5	-19	22.8	3	0.8	1.1	7.5	27	0.79
al-Mart Stores (11)	10627.5	34	40606.9	34	353.2	25	1487.9	20	3.3	3.6	23.2	40	1.29
oolworth (11)	2423.0**	-2	9842.0	3	41.0	-49	224.0	-35	1.7	3.2	9.8	17	1.72

ELECTRICAL & ELECTRONICS

INDUSTRY COMPOSITE	29920.5	2	114992.6	2	1653.8	158	3450.4	-29	5.5	2.2	7.1	30	1.31
ELECTRICAL PRODUCTS													
GROUP COMPOSITE	7988.1	-4	31198.9	-1	487.7	NM	71.1	-95	6.1	NM	0.2	NM	0.02
ooper Industries	1555.4**	-7	6162.6	-1	120.6	11	393.2	9	7.8	6.5	10.7	19	3.04
merson Electric (3)	1817.0	1	7443.4	-4	152.6	4	637.7	3	8.4	8.2	19.6	19	2.85
ubbell	184.9	5	756.1	5	22.8	5	90.6	5	12.3	12.4	17.9	20	2.87
agneTek (6)	283.8	3	1171.1	6	6.7	-7	34.4	-4	2.4	2.6	20.4	9	1.44
ational Service Industries (4)	401.6	-1	1599.1	-3	17.6	-28	25.3	-75	4.4	6.1	3.8	49	0.51
aychem (6)	328.5	4	1272.6	6	-3.7	NM	-24.1	NM	NM	0.4	-3.4	NM	-0.63
estinghouse Electric	3417.0	-8	12794.0	-1	171.0	NM	-1086.0	NM	5.0	NM	-38.6	NM	-3.46
ELECTRONICS													
GROUP COMPOSITE	12520.9	4	47667.5	3	665.0	35	1978.8	-10	5.3	4.1	9.6	15	2.60
ystems	545.2	15	1991.3	10	29.8	16	109.5	16	5.5	5.4	15.2	10	3.35
M Hughes Electronics	3155.0	9	11480.5	-1	255.7	31	505.0	-30	8.1	6.7	6.1	14	1.26
arris (6)	755.7	-1	2997.0	-2	19.2	NM	89.7	149	2.5	NM	8.6	13	2.31
iton Industries (5)	1360.9	11	5350.8	4	41.5	5	65.4	-63	3.1	3.2	5.3	32	2.93
oral (9)	711.0	6	2870.1	60	29.9	43	112.1	32	4.2	3.1	11.8	9	3.90
otorola	3039.0	4	11341.0	4	126.0	16	454.0	9	4.1	3.7	9.8	24	3.44
aytheon	2429.0	-1	9274.0	0	157.8	10	591.7	6	6.5	5.8	18.5	10	8.95
CI Systems (6)	220.9	-27	996.7	-15	-2.5	NM	-1.4	NM	NM	0.2	-0.7	NM	-0.07
arian Associates (3)	304.2	-4	1366.0	5	7.6	-38	52.7	214	2.5	3.9	12.3	15	2.70

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12-31	PRICE- EARNINGS RATIO 2-21	12 MONTHS' EARNINGS PER SHARE
	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %			
INSTRUMENTS													
GROUP COMPOSITE	4530.1	3	17148.2	1	204.4	13	665.1	12	4.5	4.1	12.8	18	2.09
Ametek	183.4	8	715.1	8	10.4	26	38.0	2	5.7	4.9	18.7	19	0.87
Beckman Instruments	233.7	4	857.9	5	10.4	4	38.1	5	4.5	4.4	11.1	16	1.32
Honeywell	1710.7	2	6192.9	-2	102.6	-6	331.1	-11	6.0	6.5	19.3	15	4.70
Imo Industries	264.5	-4	1024.0	1	2.9	-55	11.4	-46	1.1	2.4	3.4	17	0.68
Johnson Controls (3)	1215.4	6	4626.1	1	28.4	16	99.0	12	2.3	2.1	10.2	17	2.28
Millipore	200.8	5	748.0	6	18.5	NM	60.4	117	9.2	NM	12.6	17	2.17
Perkin-Elmer (5)	198.3	-3	867.8	1	9.0	-7	-4.9	NM	4.5	4.7	-1.2	NM	-0.15
Tektronix (7)	303.2	-2	1310.9	-6	8.1	-31	44.9	NM	2.7	3.8	10.1	12	1.53
Thermo Electron	220.2	2	805.5	12	14.2	39	47.1	35	6.4	4.7	10.5	23	1.97
SEMICONDUCTORS													
GROUP COMPOSITE	4881.4	5	18978.2	8	296.7	178	735.4	4	6.1	2.3	6.7	43	1.00
Advanced Micro Devices	366.2	38	1226.6	16	106.7	NM	145.3	NM	29.2	NM	17.2	13	1.53
AMP	791.0	2	3095.4	2	63.0	-5	259.3	-10	8.0	8.6	13.6	26	2.45
Intel	1205.4	15	4778.6	22	188.7	15	818.6	26	15.7	15.7	18.5	17	3.92
LSI Logic	164.3	-11	697.8	6	0.9	NM	8.3	NM	0.6	NM	2.8	50	0.19
Molex (6)	189.3	9	739.8	14	16.4	5	63.3	-4	8.7	9.0	10.2	29	1.28
National Semiconductor (7)	413.2	-3	1655.9	-4	5.9	69	-150.4	NM	1.4	0.8	-32.6	NM	-1.55
Texas Instruments	1752.0	0	6784.0	3	-85.0	NM	-409.0	NM	NM	NM	-27.9	NM	-5.40
FOOD													
INDUSTRY COMPOSITE	82099.5	2	322029.6	4	1915.6	-8	8145.9	28	2.3	2.6	20.0	20	1.74
FOOD DISTRIBUTION													
GROUP COMPOSITE	11276.5	5	46235.4	5	149.1	8	552.1	8	1.3	1.3	13.5	16	1.91
Fleming	3075.2	5	12901.6	8	-12.4	NM	72.3	-26	NM	0.9	7.0	14	2.06
Nash Finch	546.7**	0	2343.3	-1	5.7	24	19.1	7	1.0	0.8	10.9	11	1.75
Richfood Holdings (8)	242.4	3	1021.9	1	2.6	36	10.9	61	1.1	0.8	18.9	17	1.05
Rykoff-Sexton (8)	383.6	2	1471.2	2	5.1	11	14.1	31	1.3	1.2	7.5	16	1.22
Smart & Final	157.5	11	663.1	18	2.5	41	2.7	-71	1.6	1.2	2.8	86	0.26
Super Food Services (4)	440.6**	4	1842.2	3	2.5	-27	11.3	-33	0.6	0.8	8.5	14	1.04
Super Rite (10)	305.2	23	1061.2	12	2.5	53	3.3	-26	0.8	0.6	-2.1	NM	-0.11
Super Valu Stores (10)	2471.4	3	10744.3	3	84.4	122	207.3	37	3.4	1.6	18.9	9	2.76
Sysco (6)	2180.7	8	8468.6	8	43.8	8	161.6	11	2.0	2.0	16.1	25	1.74
Wetterau (9)	1473.3**	0	5718.0	2	12.4	-19	49.5	-1	0.8	1.0	19.1	10	2.16
FOOD PROCESSING													
GROUP COMPOSITE	35510.3	2	136841.1	5	1631.3	5	6410.7	22	4.6	4.5	21.2	19	2.09
Archer Daniels Midland (6)	2304.5	5	8800.9	5	131.1	12	499.1	9	5.7	5.4	11.7	18	1.61
Borden	1845.6	-3	7235.1	-5	43.1	-58	294.9	-19	2.3	5.4	15.2	17	2.00
Campbell Soup (5)	1547.2	-3	6157.0	-2	129.2	23	425.6	NM	8.4	6.6	23.7	23	1.68
ConAgra (7)	5470.7	-1	20484.9	15	111.7	17	345.4	25	2.0	1.7	15.5	21	1.45
CPC International	1546.0	2	6189.1	7	110.1	9	404.2	8	7.1	6.7	29.3	15	5.22
Curtice-Burns Food (6)	242.2	-7	906.2	-4	2.5	-23	2.2	-56	1.0	1.2	2.1	60	0.25
Dean Foods (7)	551.3	-1	2167.8	1	15.9	-5	72.7	9	2.9	3.0	16.3	16	1.79
Dole Food	699.8	4	3216.0	7	29.1	50	133.7	11	4.2	2.9	13.1	15	2.24
Flowers Industries (6)	205.3	5	838.4	1	5.4	15	24.0	-24	2.7	2.4	11.7	22	0.71
General Mills (7)	1992.5	8	7485.9	9	128.3	9	492.6	18	6.4	6.4	38.0	23	2.98
Gerber Products (9)	298.2	8	1208.5	3	14.5	-47	106.4	-6	4.9	9.9	24.2	24	2.85
Heinz (H. J.) (8)	1592.3	-3	6535.9	4	122.8	-12	662.2	24	7.7	8.5	29.1	16	2.48
Hershey Foods	863.9	13	2899.2	7	74.9	61	219.5	2	8.7	6.1	16.4	17	2.43
Hormel (Geo. A.) (2)	760.6	-2	2836.2	6	36.6	1	86.4	12	4.8	4.7	14.8	17	1.13
Hudson Foods (3)	213.4	12	788.5	11	0.1	-91	7.7	-18	0.0	0.5	5.8	14	0.54
IBP	2526.1	-2	10387.7	2	11.9	0	1.4	-97	0.5	0.5	0.3	NM	0.03
Imperial Holly (9)	186.7	1	711.4	0	-1.7	NM	11.6	-39	NM	4.4	8.3	13	1.14
Interstate Bakeries (7)	265.4	2	1118.3	0	9.8	NM	5.1	NM	3.7	0.3	2.7	NM	-0.95
International Multifoods (10)	635.0	10	2271.5	4	15.3	10	39.0	26	2.4	2.4	11.6	13	2.00
Kellogg	1445.3	6	5786.6	12	118.2	9	606.0	21	8.2	8.0	28.9	22	2.51
McCormick (1)	429.9	8	1427.9	8	30.0	18	80.9	17	7.0	6.4	20.8	26	0.98
Pet (6)	540.5	1	1878.3	-1	41.6	42	99.6	NM	7.7	5.5	18.7	23	0.93
Pilgrim's Pride (3)	195.5	5	796.4	7	-4.2	NM	7.0	-58	NM	0.6	6.2	22	0.30
Quaker Oats (6)	1342.8	4	5569.5	5	44.7	35	256.6	13	3.3	2.6	30.0	20	3.32
Ralston Purina (3)	2029.2	4	7448.2	4	130.7	-3	387.3	-3	6.4	6.9	41.3	17	3.31
Sara Lee (6)	3599.7	7	12656.6	4	189.4	14	714.7	43	5.3	5.0	26.8	18	2.91
Savannah Foods & Industries	294.1	-7	1199.7	-1	9.3	-27	38.3	-21	3.2	4.0	17.4	14	1.43
Smithfield Foods (8)	259.7	-2	1071.0	11	5.0	-4	29.6	101	1.9	2.0	27.4	9	2.00
Thorn Apple Valley (7)	190.3	-6	799.3	5	6.5	20	21.8	392	3.4	2.7	33.8	6	5.57
Tyson Foods (3)	956.7	6	3977.6	4	31.9	10	148.5	18	3.3	3.2	17.4	16	1.07
Universal Foods (3)	206.3	4	842.8	4	14.6	2	58.0	15	7.1	7.3	19.0	15	2.19
Wrigley (Wm.) Jr.	273.5	7	1148.9	3	23.1	15	128.7	10	8.4	7.9	27.8	22	3.28
FOOD RETAILING													
GROUP COMPOSITE	35312.7	0	138953.0	2	135.2	-65	1183.2	95	0.4	1.1	18.7	27	0.91
Albertson's (11)	2129.8	5	8595.1	7	59.5	7	250.7	14	2.8	2.8	21.5	23	1.88
American Stores (11)	4939.4	-9	21314.6	-6	28.9	-6	267.3	79	0.6	0.6	17.8	9	3.87
Bruno's (6)	723.5	1	2657.5	5	17.9	-3	63.5	-2	2.5	2.6	15.4	20	0.78
Casey's General Stores (8)	157.3*	-1	607.4	12	3.9	28	11.0	37	2.5	1.9	12.0	16	1.00

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CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12/31	PRICE- EARNINGS RATIO 2-21	12 MONTHS EARNINGS PER SHARE
	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %			
Circle K (8)	735.4**	-21	3275.0	-9	3.7	NM	-265.6	NM	0.5	NM	NM	NM	-6.15
Fairy Mart Convenience Stores (11)	147.6*	-8	581.1	0	1.6	7	3.9	-3	1.1	0.9	10.0	12	0.71
Helchamps (6)	234.3	-3	933.2	-4	0.2	-94	10.3	-27	0.1	1.3	9.6	15	1.45
Meagle Food Centers (11)	271.0	-1	1125.2	-2	2.0	3	-0.7	NM	0.7	0.7	-1.2	NM	-0.05
Food Lion	2022.7	13	6438.5	15	60.8	13	205.2	19	3.0	3.0	24.8	34	0.64
Foodarama Supermarkets (2)	175.7	0	695.3	3	-1.1	NM	-0.6	NM	NM	NM	-1.7	NM	-0.49
Giant Food (10)	773.8	2	3396.8	1	14.2	-43	102.2	-13	1.8	3.3	16.9	14	1.73
Great Atlantic & Pacific Tea (10)	2607.7	0	11624.0	4	3.9	-88	86.2	-44	0.2	1.2	6.8	14	2.26
Kannaford Brothers	505.9**	17	2008.0	19	10.7	24	43.4	3	2.1	2.0	15.0	25	2.16
Kings Markets (3)	259.5	-1	1041.7	2	1.5	-36	9.9	2	0.6	0.9	7.2	13	0.55
Kroger	5128.6	3	21350.5	5	41.1	-39	100.7	21	0.8	1.4	NM	16	1.12
Kroger Supermarkets (9)	267.9***	4	1125.8	3	0.5	-86	9.6	-24	0.2	1.3	11.0	11	1.23
National Convenience Stores (6)	240.9	-15	1006.2	-9	-177.7	NM	-192.8	NM	NM	0.2	NM	NM	-9.14
Penn Traffic (11)	683.4**	1	2769.1	-4	-3.0	NM	-9.5	NM	NM	NM	-37.4	NM	-1.49
Peter Foods (6)	230.6	-5	998.0	-4	2.2	-23	9.1	14	0.9	1.2	21.0	8	1.11
Puddick (3)	388.8	7	1503.5	5	7.7	36	28.8	20	2.0	1.6	12.3	14	1.28
Rafeway	4661.8	1	15119.2	2	-36.3	NM	79.0	-9	NM	0.6	30.0	26	0.69
Smith's Food & Drug Centers	593.5	12	2217.4	9	11.6	29	45.1	31	2.0	1.7	9.5	25	1.65
Top & Shop (11)	1117.0	2	5087.8	4	-0.4	NM	25.7	NM	NM	NM	26.6	21	0.77
Supermarkets General Holding (11)	1425.2	-4	5942.7	-5	-13.1	NM	-24.5	NM	NM	NM	NM	NA	NA
Village Super Market (5)	159.3	4	692.1	2	0.1	-42	1.8	-50	0.1	0.2	3.5	12	0.61
Wons	1239.6	-2	5350.2	0	18.4	4	65.0	31	1.5	1.4	14.0	17	1.56
Wells Markets	333.3	2	1294.3	2	22.5	-10	80.6	-7	6.8	7.6	12.6	15	1.81
Winn-Dixie Stores (6)	3159.3	3	10203.0	2	53.8	10	177.9	12	1.7	1.6	20.3	19	2.31
INDUSTRY COMPOSITE	109735.8	-19	424262.5	-5	2485.9	-39	15161.1	-16	2.3	3.0	10.5	17	2.39
INDUSTRY COMPOSITE	1317.8	2	4803.3	4	-10.6	NM	61.4	-64	NM	3.3	4.4	30	0.66
Acco Industries	389.7	-3	1369.2	-1	10.2	NM	20.5	-34	2.6	NM	6.1	23	2.31
Arco	290.6	14	919.6	11	54.5	147	83.1	4	18.8	8.7	13.7	7	2.12
Atkisson	496.5**	0	1946.1	4	-67.8	NM	-28.8	NM	NM	4.0	-9.1	NM	-0.77
Westmoreland Coal	141.0	4	568.4	3	-7.4	NM	-13.4	NM	NM	0.6	-9.3	NM	-1.62
INDUSTRY COMPOSITE	102562.7	-20	396557.2	-5	2164.2	-42	13894.3	-17	2.1	2.9	10.4	17	2.52
Amstar Hess	1621.8**	-33	6416.3	-9	-51.6	NM	84.3	-83	NM	9.7	2.7	39	1.04
Arco	6437.0	-25	25325.0	-10	200.0	-63	1220.0	-36	3.1	6.3	8.5	19	2.45
Shland Oil (3)	2361.3	-4	9201.3	-1	29.5	NM	185.2	24	1.2	NM	12.7	10	3.24
Atlantic Richfield	4827.0*	-16	18157.0	-3	268.0	-53	709.0	-58	5.6	9.9	10.5	23	4.39
Amstar Resources	475.7	-5	1753.9	-3	48.5	-7	197.4	-4	10.2	10.5	6.8	24	1.48
Chevron	10400.0***	-25	40900.0	-4	39.0	-94	1293.0	-40	0.4	4.6	8.5	16	3.69
Castal	2593.9	-12	9548.8	-1	12.4	-87	96.3	-57	0.5	3.2	4.7	26	0.92
Diamond Shamrock	637.3	-23	2575.9	-5	-2.3	NM	37.1	-52	NM	0.9	8.4	17	1.39
Exxon	27526.0**	-14	104216.9	-2	1120.0	-28	5600.0	12	4.1	4.9	16.7	13	4.45
Ena	859.1	-28	3336.4	-16	21.8	14	42.0	-67	2.5	1.6	3.7	28	2.71
Enr-McGee	872.1	-22	3274.1	-11	34.8	170	101.6	-10	4.0	1.2	6.8	17	2.10
Louisiana Land & Exploration	220.6**	-7	825.3	-6	5.9	-78	20.9	-62	2.7	11.4	4.7	37	0.74
Lapco	732.7*	-17	2782.8	-1	31.1	15	125.9	-3	4.2	3.1	32.7	15	4.20
Maxus Energy	205.3	-4	790.8	15	-3.4	NM	-11.2	NM	NM	7.5	NM	NM	-0.52
Mitchell Energy & Development (11)	222.2	2	864.5	16	14.1	-22	48.8	19	6.3	8.3	7.8	15	1.05
Mobil	14799.0**	-16	56432.0	-4	401.0	-39	1921.0	0	2.7	3.7	11.4	13	4.65
Murphy Oil	413.7**	-34	1689.5	-15	26.1	27	-9.6	NM	6.3	3.3	-0.8	NM	-0.24
Noradental Petroleum	2609.0	-25	10096.0	-12	3.0	NM	379.0	NM	0.1	NM	8.5	15	1.25
Ryx Energy	370.0**	-52	1601.0	-25	-40.0	NM	19.0	-92	NM	18.3	1.0	NM	0.08
Ennzoil	662.5**	-9	2684.7	-2	4.4	-71	-42.0	NM	0.7	2.1	-3.4	NM	-1.05
Phillips Petroleum	3372.0**	-24	13259.0	-5	-177.0	NM	98.0	-82	NM	5.3	3.5	58	0.38
Quaker State	200.8	-7	813.6	-7	3.6	-21	15.5	-21	1.8	2.1	5.1	25	0.58
Un	2970.0***	-25	11930.0	-9	-35.0	NM	-132.0	NM	NM	0.8	-4.7	NM	-1.25
Esoro Petroleum (3)	240.6	-28	991.4	-9	-0.4	NM	-1.3	NM	NM	1.5	-7.8	NM	-0.74
Exaco	9755.0**	-25	38322.0	-8	324.0	-17	1294.0	-11	3.3	3.0	14.0	12	4.61
Esco	484.7	-24	1979.7	-8	33.5	147	75.4	-39	6.9	2.1	15.2	12	2.39
Union Texas Petroleum Holdings	201.0**	-54	1080.0	-19	27.0	-55	279.5	141	13.4	13.6	37.7	8	2.35
Enocal	2512.0**	-20	9845.0	-10	-16.0	NM	73.0	-82	NM	1.2	2.9	70	0.31
Enocal Exploration	214.1**	-27	877.6	-4	48.5	-6	146.8	-10	22.7	17.7	19.3	17	0.58
ESX-Marathon Group	3571.0	-23	13975.0	-4	-229.0	NM	-71.0	NM	NM	4.7	-2.4	NM	-0.31
Enalero Energy	195.4	-42	1011.8	-13	22.8	-32	98.7	4	11.7	9.9	13.4	15	2.28
INDUSTRY COMPOSITE	5855.2	-2	22902.0	6	332.2	-1	1205.4	3	5.7	5.6	12.1	10	1.65
Enker Hughes (3)	602.5	-12	2747.0	1	24.6	-32	161.7	6	4.1	5.3	10.4	16	1.18
Enroid	193.3	9	706.1	18	-15.6	NM	0.6	-97	NM	4.3	0.2	NM	0.01
Enl Industries	419.7**	2	1614.9	3	18.2	37	61.1	11	4.3	3.2	10.2	24	1.54
Enresser Industries (2)	1253.0	-9	4670.0	4	57.0	-18	139.8	-20	4.6	5.1	7.9	20	1.04
Enaliburton	1775.4**	-4	7018.8	1	-57.7	NM	26.6	-87	NM	3.2	1.2	NM	0.25
Enhlumberger	1611.4	10	6145.2	16	305.7	104	815.7	43	19.0	10.2	22.9	18	3.42

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CORPORATE SCOREBOARD

COMPANY

SALES

PROFITS

MARGINS

RETURN ON
COMMON
EQUITY
12 MONTHS
ENDING
12/31

PRICE-
EARNINGS
RATIO
2/21

12
MONTHS'
EARNINGS
PER
SHARE

4TH
QUARTER
1991
\$ MIL

CHANGE
FROM
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12
MONTHS
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4TH
QUARTER
1990
%

12 MONTHS
ENDING
12/31

PRICE-
EARNINGS
RATIO
2/21

12
MONTHS'
EARNINGS
PER
SHARE

12 HEALTH CARE

INDUSTRY COMPOSITE	45304.1	12	172289.7	12	3407.2	-2	15843.8	22	7.5	8.6	25.6	23	2.56
(a) DRUG DISTRIBUTION GROUP COMPOSITE	11354.1	16	43301.2	13	131.1	18	666.8	10	1.2	1.1	13.7	22	1.23
Alco Health Services (3)	798.1	20	2961.9	15	-1.8	NM	-13.6	NM	NM	NM	-72.8	NA	NA
Bergen Brunswig (4)	1304.6**	10	4960.5	9	8.9	-48	56.1	-13	0.7	1.4	13.9	14	1.33
Cardinal Distribution (9)	453.4	44	1505.6	39	6.5	45	22.5	43	1.4	1.4	10.7	26	1.25
Drug Emporium (10)	177.8	16	723.9	25	0.6	-54	0.1	NM	0.4	0.9	0.1	NM	0.01
Durr-Fillauer Medical	255.2	20	950.5	17	4.4	-13	18.4	8	1.7	2.3	13.3	15	1.45
Eckerd (Jack) (11)	823.2	5	3523.4	4	-15.6	NM	-10.6	NM	NM	NM	NM	NA	NA
Fay's (11)	212.6	28	787.8	22	1.1	-59	9.2	-15	0.5	1.5	11.5	18	0.59
FoxMeyer (9)	788.1	7	3015.1	9	7.4	41	23.0	NA	0.9	0.7	4.6	16	0.86
Longs Drug Stores (11)	571.3	3	2398.3	6	11.5	-4	57.0	-7	2.0	2.1	14.0	13	2.80
McKesson (9)	2743.7**	25	9710.7	16	18.9	-31	97.6	1	0.7	1.2	14.7	15	2.25
Medco Containment Services (6)	422.5	35	1550.8	33	26.6	119	84.5	107	6.3	3.9	16.2	56	0.58
Perry Drug Stores (2)	165.1	7	640.8	1	1.9	NM	6.1	113	1.1	NM	12.5	17	0.59
Rite Aid (10)	929.8	8	3670.5	9	25.3	17	118.3	15	2.7	2.5	12.9	15	1.39
Walgreen (4)	1708.7	11	6901.3	11	35.4	10	198.3	11	2.1	2.1	18.0	22	1.61
(b) DRUGS & RESEARCH GROUP COMPOSITE	16747.8	9	62940.9	11	2217.4	-7	10417.8	13	13.2	15.6	30.9	23	3.15
Allergan	227.5	6	839.3	6	25.7	15	-61.4	NM	11.3	10.4	-13.8	NM	-0.92
American Home Products	1819.8	13	7079.4	5	372.6	14	1375.3	12	20.5	20.3	44.4	17	4.36
Amgen	210.0	130	682.0	128	60.0	NM	97.9	NM	28.5	NM	18.4	94	0.67
Bristol-Myers Squibb	2937.2	7	11159.2	8	510.0	20	2056.0	18	17.4	15.6	36.1	20	3.95
Carter-Wallace (9)	157.9	0	666.3	9	13.8	3	45.6	-14	8.7	8.5	11.2	37	2.99
Lilly (Eli)	1572.6	9	5725.7	10	311.1	22	1314.7	17	19.8	17.7	27.0	16	4.50
Marion Merrell Dow	773.0	23	2851.0	16	129.0	15	585.0	20	16.7	17.8	41.7	17	2.08
Merck	2313.9	10	8602.7	12	529.8	20	2121.7	19	22.9	21.1	45.6	27	5.49
Pfizer	1850.2	4	6950.0	9	0.9	NM	722.1	-10	0.0	8.7	14.2	34	2.13
Rhone-Poulenc Rorer	1110.0	1	3824.3	31	124.6	-23	326.5	NM	11.2	14.8	36.9	26	2.37
Schering-Plough	865.6	8	3615.6	9	149.0	14	645.6	14	17.2	16.3	34.9	19	3.01
Sigma-Aldrich	144.5	8	589.4	11	19.4	14	79.8	12	13.4	12.7	19.2	30	1.60
Syntex (5)	508.4	12	1870.7	18	132.3	6	430.9	19	26.0	27.5	39.4	24	1.92
Upjohn	920.2	14	3426.3	13	136.4	18	537.4	17	14.8	14.4	31.4	14	2.96
Warner-Lambert	1337.0	7	5058.9	8	-297.1	NM	140.8	-71	NM	8.5	8.7	65	1.05
(c) HEALTH CARE SERVICES GROUP COMPOSITE	7225.4	14	27806.7	13	161.8	3	904.9	111	2.2	2.5	15.3	20	0.97
American Medical Holdings (4)	538.6	-15	2452.1	-2	2.0	NM	3.7	NM	0.4	NM	0.7	NM	0.04
Beverly Enterprises	610.2	11	2300.9	9	7.0	112	29.2	125	1.1	0.6	5.5	24	0.37
Charter Medical (3)	313.2	10	1216.8	-2	-35.9	NM	-119.5	NM	NM	NM	NM	NA	-5.70
Continental Medical Systems (6)	156.0	59	491.0	65	6.7	58	22.6	64	4.3	4.3	10.8	29	0.73
FHP International (6)	375.1	20	1430.1	24	4.1	-50	33.3	3	1.1	2.7	11.7	14	1.08
Foundation Health (6)	275.1	8	1023.7	7	10.8	66	35.6	121	3.9	2.5	37.2	19	1.69
Healthtrust (4)	558.1	16	2103.6	12	22.0	386	24.1	NM	4.0	0.9	NA	NM	-0.90
Hillhaven (7)	332.4	11	1284.1	11	-87.4	NM	-85.7	NM	NM	0.0	-65.5	NM	-0.83
Humana (4)	1564.0	18	6099.0	20	76.0	1	356.0	11	4.9	5.6	17.6	12	2.25
Manor Care (7)	226.1	11	867.7	15	12.3	33	37.2	24	5.4	4.5	13.9	24	0.98
National Medical Enterprises (7)	1023.2	8	3972.7	6	70.6	5	292.3	13	6.9	7.1	16.4	9	1.75
PacificCare Health Systems (3)	360.1	29	1323.2	26	6.6	164	29.8	73	1.8	0.9	29.9	21	2.56
U. S. Healthcare	459.0**	32	1708.5	28	43.3	32	151.1	95	9.4	9.4	45.8	24	2.09
United HealthCare	260.3**	54	847.1	40	21.3	107	74.8	121	8.2	6.1	26.4	33	2.40
Universal Health Services	174.1	1	686.1	3	2.3	107	20.3	75	1.3	0.6	11.2	10	1.45
(d) MEDICAL PRODUCTS GROUP COMPOSITE	9976.7	12	38241.0	11	896.8	7	3854.2	39	9.0	9.4	21.9	24	2.72
Abbott Laboratories	1886.3	10	6876.6	12	314.7	13	1088.7	13	16.7	16.4	36.2	24	2.55
Bard (C. R.)	225.6	15	876.0	12	15.1	44	57.2	42	6.7	5.3	16.4	26	1.08
Bausch & Lomb	386.9	12	1520.1	11	-18.3	NM	85.9	-35	NM	11.4	9.9	36	1.42
Baxter International	2390.0	10	8921.0	10	184.0	3	591.0	NM	7.7	8.2	14.4	17	2.03
Becton, Dickinson (3)	501.0	4	2190.9	6	21.8	-26	182.1	-1	4.3	6.1	13.7	15	4.66
Imcera Group (6)	420.2	6	1663.5	8	25.9	35	114.6	45	6.2	4.8	10.2	23	1.51
Johnson & Johnson	3148.0	13	12447.0	11	274.0	18	1461.0	28	8.7	8.3	27.3	23	4.39
Medtronic (8)	279.0	10	1077.3	14	38.5	34	149.1	24	13.8	11.3	20.1	32	2.50
Owens & Minor	352.4	11	1320.4	8	3.5	25	12.0	37	1.0	0.9	12.8	21	0.92
U. S. Surgical	242.7	57	843.6	64	28.6	96	91.2	98	11.8	9.5	27.6	68	1.58
Westmark International	144.6	19	504.7	4	8.9	140	21.4	31	6.2	3.0	6.8	28	2.09

13 HOUSING & REAL ESTATE

INDUSTRY COMPOSITE	7479.5	-3	29420.7	-5	-448.1	NM	-111.8	NM	NM	0.9	-2.4	NM	-0.20
(a) BUILDING MATERIALS GROUP COMPOSITE	4781.3	-2	19387.5	-4	-509.0	NM	-236.7	NM	NM	1.5	-6.8	NM	-0.54
Lafarge	380.6	-12	1568.8	-11	-19.4	NM	-50.4	NM	NM	1.2	-5.8	NM	-0.90
Owens-Corning Fiberglas	687.0	-9	2783.0	-9	-529.0	NM	-515.0	NM	NM	NM	NM	NM	-12.17
PPG Industries	1424.5	-5	5672.6	-6	31.5	-69	201.4	-58	2.2	6.8	7.6	31	1.90

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CORPORATE SCOREBOARD



Satellite Map Source: National Air Survey Center, Corp.

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CORPORATE SCOREBOARD

COMPANY

SALES

PROFITS

MARGINS

RETURN ON

PRICE

	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS END 12/31 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS END 12/31 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 12/31	PRICE EARNINGS RATIO 12/31	12 MONTHS EARNING PER SHARE
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Sherwin-Williams	553.7	7	2541.4	12	22.6	8	128.2	5	4.1	4.1	15.1	19	1.45
Tecumseh Products	278.8	2	1197.2	-9	10.8	468	42.5	199	3.9	0.7	6.1	15	7.77
Texas Industries (7)	153.2**	-1	619.7	3	2.6	NM	4.3	-77	1.7	NM	1.5	55	0.39
USG	417.0	-8	1712.0	-11	-43.0	NM	-141.0	NM	NM	NM	NM	NM	-2.53
Valspar (2)	170.9	16	632.6	11	9.7	42	27.7	4	5.7	4.6	18.7	27	2.53
Vulcan Materials	254.8	-6	1007.5	-9	-1.3	NM	52.6	-56	NM	7.3	7.7	28	1.38
York International	460.9	29	1652.7	14	6.5	NM	13.0	219	1.4	NM	929.7	61	0.56

(b) CONSTRUCTION & REAL ESTATE

GROUP COMPOSITE	2698.2	-4	10033.2	-8	60.8	NM	124.9	-5	2.3	NM	8.1	29	0.83
Centex (9)	546.9**	-3	2155.2	-6	10.2	22	29.4	-47	1.9	1.5	5.9	28	1.90
Kaufman & Broad Home (1)	317.8	-15	1221.0	-11	13.3	317	26.5	-34	4.2	0.8	11.0	27	0.80
Perini	282.2	3	982.9	-3	1.0	NM	3.2	NM	0.4	NM	0.8	50	0.27
PHM	353.9**	11	1213.8	5	20.9	458	42.6	43	5.9	1.2	12.7	17	1.71
Rouse	158.2**	1	573.5	8	14.9	613	2.4	NM	9.4	1.3	NM	NM	0.05
Ryland Group	343.8	2	1214.3	-8	1.7	-56	9.5	-57	0.5	1.2	3.1	52	0.53
Turner	695.4**	-11	2672.5	-18	1.1	NM	11.3	NM	NM	NM	20.5	5	2.06

14 LEISURE TIME INDUSTRIES

INDUSTRY COMPOSITE	21313.0	7	76254.4	5	542.2	-45	3586.8	-5	2.5	5.0	11.9	25	1.57
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(a) EATING PLACES

GROUP COMPOSITE	3891.1	3	15058.0	2	237.8	12	950.6	11	6.1	5.6	18.3	21	1.41
Bob Evans Farms (8)	142.2	12	524.6	9	10.2	16	36.2	25	7.2	6.9	14.1	24	1.16
Foodmaker (3)	366.9**	7	1180.3	4	2.4	516	3.7	-54	0.7	0.1	6.9	NA	NA
McDonald's	1729.8	2	6695.0	1	200.4	8	859.6	7	11.6	10.9	19.6	18	2.35
Morrison (7)	260.1**	6	999.4	7	8.9	20	28.9	42	3.4	3.0	15.0	20	1.76
Shoney's (2)	233.9**	7	992.4	7	9.3	38	38.0	29	4.0	3.1	NM	28	0.94
TW Holdings	891.0	0	3617.9	0	-4.3	NM	-67.6	NM	NM	NM	-83.1	NM	-0.61
Wendy's International	267.1	8	1048.3	5	10.9	40	51.7	34	4.1	3.1	10.9	25	0.52

(b) ENTERTAINMENT

GROUP COMPOSITE	3710.4	17	12422.2	8	359.9	5	991.2	-20	9.7	10.7	11.6	29	2.11
Blockbuster Entertainment	251.4	40	868.0	37	29.0	37	93.7	36	11.5	11.8	21.3	23	0.56
Commtron (4)	151.7**	-1	526.9	-1	2.9	-9	7.4	-20	1.9	2.1	10.0	10	0.72
Disney (Walt) (3)	1936.6	30	6626.6	10	208.1	22	674.3	-18	10.7	11.4	17.4	30	5.06
King World Productions (4)	204.4	17	505.3	10	36.6	1	93.6	8	17.9	20.7	33.5	11	2.38
Paramount Communications (2)	1166.3	-1	3895.4	1	83.3	-25	122.2	-53	7.1	9.4	3.1	43	1.03

(c) HOTEL & MOTEL

GROUP COMPOSITE	3708.2	5	12175.4	8	108.0	NM	353.8	22	2.9	NM	14.6	33	1.36
Caesars World (5)	233.1	-1	905.8	3	22.9	63	58.5	76	9.8	6.0	17.3	15	2.45
Circus Circus Enterprises (11)	211.4	3	794.8	25	29.3	13	99.0	34	13.9	12.6	32.4	25	1.78
Hilton Hotels	283.5**	-13	1112.7	-1	29.6	8	84.3	-25	10.4	8.4	9.0	25	1.76
Marriott	2729.0	7	8331.0	9	27.0	NM	82.0	74	1.0	NM	18.0	22	0.80
Promus	251.2	5	1031.1	3	-0.8	NM	30.0	29	NM	NM	7.9	28	1.00

(d) OTHER LEISURE

GROUP COMPOSITE	10003.3	6	36598.9	4	-163.4	NM	1291.3	-8	NM	4.7	9.2	25	1.46
American Greetings (10)	466.5	10	1512.8	10	40.8	17	92.7	17	8.7	8.2	11.1	14	2.76
Brunswick	523.5	-2	2088.3	-16	-13.7	NM	-23.7	NM	NM	NM	-3.0	NM	-0.27
Carnival Cruise Lines (1)	305.6	13	1404.7	12	38.7	11	253.8	8	12.7	12.9	19.5	18	1.85
Eastman Kodak	5082.0	-1	19419.0	3	-400.0	NM	17.0	-98	NM	6.3	0.3	NM	0.05
Fisher-Price (6)	185.0	0	637.6	4	4.0	NM	17.3	NM	2.2	NM	7.8	NA	NA
Fleetwood Enterprises (8)	391.5	12	1452.2	-4	9.1	37	34.1	-22	2.3	1.9	7.5	27	1.52
Gibson Greetings	201.8	-3	524.3	2	22.9	21	41.9	5	11.3	9.1	15.0	11	2.61
Harley-Davidson	237.7	22	939.9	9	7.2	145	37.0	-3	3.0	1.5	16.1	26	2.08
Harman International Industries (6)	163.3	-2	587.3	-1	1.5	755	-20.8	NM	0.9	0.1	-25.1	NM	-2.37
Hasbro	761.2	54	2141.1	41	44.8	61	81.7	-8	5.9	5.7	9.2	26	1.41
Huffy	161.6	33	678.9	31	3.8	278	19.8	10	2.4	0.8	16.3	16	1.52
Mattel	513.6	20	1621.7	10	29.3	100	118.1	29	5.7	3.4	26.9	18	1.85
Outboard Marine (3)	193.2	-6	971.7	-13	-17.8	NM	-80.5	NM	NM	NM	-18.2	NM	-4.15
Polaroid	633.4	6	2070.6	5	58.5	6	683.7	353	9.2	9.2	81.2	2	12.54
Tyco Toys	183.4	55	548.7	19	7.5	NM	19.2	472	4.1	NM	17.4	17	2.28

15 MANUFACTURING

INDUSTRY COMPOSITE	27916.1	-3	108239.4	-2	360.3	-59	2632.6	-39	1.3	3.0	7.0	32	1.31
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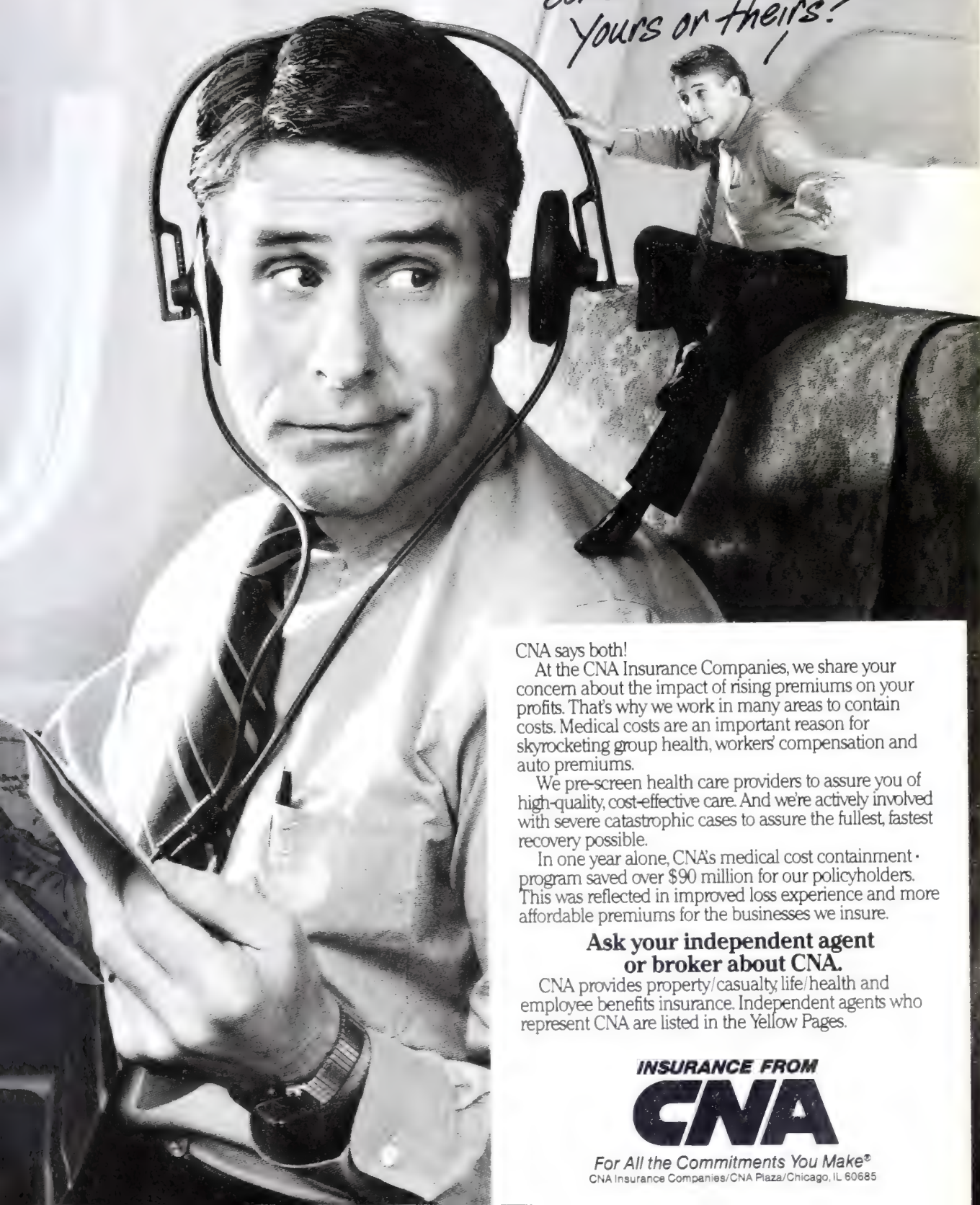
(a) GENERAL MANUFACTURING

GROUP COMPOSITE	10454.5	-2	40573.1	1	506.5	-17	2242.1	-10	4.8	5.7	13.6	23	2.07
Alliant Techsystems (9)	252.4	-46	1047.1	-16	8.0	-53	33.2	36	3.2	3.6	27.2	7	3.34
Avery Dennison	649.4	-3	2545.1	-2	17.7	NM	63.0	968	2.7	NM	7.6	26	1.02
Blount (10)	169.7	-8	604.4	-12	1.7	-43	-4.4	NM	1.0	1.6	-2.9	NM	-0.36
Corning I	826.3	7	3259.2	11	85.6	19	311.2	8	10.4	9.3	15.3	20	1.66
Crane	315.4	-5	1302.5	-9	10.8	-33	45.0	-28	3.4	4.8	13.6	19	1.42
Duracell International (6)	588.5	5	1589.4	10	99.1	62	113.6	474	16.8	11.0	11.6	36	0.86
Exide (9)	158.7	-26	626.7	-16	2.4	-19	-7.8	NM	1.5	1.4	NM	NA	NM
First Brands (6)	243.0	-4	997.1	-5	11.3	-31	38.6	-8	4.7	6.4	15.0	15	1.77

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Questions to ask yourself about business insurance:

*"Whose bottom line
is your insurance company
concerned about?
Yours or theirs?"*



CNA says both!

At the CNA Insurance Companies, we share your concern about the impact of rising premiums on your profits. That's why we work in many areas to contain costs. Medical costs are an important reason for skyrocketing group health, workers' compensation and auto premiums.

We pre-screen health care providers to assure you of high-quality, cost-effective care. And we're actively involved with severe catastrophic cases to assure the fullest, fastest recovery possible.

In one year alone, CNA's medical cost containment program saved over \$90 million for our policyholders. This was reflected in improved loss experience and more affordable premiums for the businesses we insure.

**Ask your independent agent
or broker about CNA.**

CNA provides property/casualty, life/health and employee benefits insurance. Independent agents who represent CNA are listed in the Yellow Pages.

INSURANCE FROM

CNA

For All the Commitments You Make®

CNA Insurance Companies/CNA Plaza/Chicago, IL 60685

CORPORATE SCOREBOARD

COMPANY

SALES

PROFITS

MARGINS

RETURN ON
COMMON
EQUITY
12 MONTHS
ENDING
12/31

PRICE-
EARNINGS
RATIO
2/21

12
MONTHS'
EARNINGS
PER
SHARE

4TH
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1991
\$ MIL

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12
MONTHS
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1990
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12 MONTHS
ENDING
12/31

PRICE-
EARNINGS
RATIO
2/21

12
MONTHS'
EARNINGS
PER
SHARE

Great American Management (5)	342.5	-4	1266.5	0	1.4	-46	6.2	-42	0.4	0.7	1.9	48	0.56
Harsco	586.3	16	1943.1	10	27.3	40	76.5	6	4.7	3.8	16.5	13	2.91
Hillenbrand Industries (1)	331.2	14	1198.9	8	25.9	34	89.2	18	7.8	6.7	18.2	32	2.45
Illinois Tool Works	704.2	4	2639.7	4	47.1	3	180.6	-1	6.7	6.8	14.9	20	3.25
Jostens (6)	232.6	5	871.5	6	15.4	6	65.1	5	6.6	6.5	21.7	22	1.60
Lancaster Colony (6)	146.6	9	516.5	2	7.8	34	25.1	56	5.3	4.4	17.3	19	2.19
Mark IV Industries (10)	289.1	27	1123.3	29	8.6	41	28.5	14	3.0	2.7	8.8	13	1.70
Minnesota Mining & Mfg.	3224.0	-2	13340.0	2	259.0	-12	1154.0	-12	8.0	9.0	18.3	18	5.26
Parker Hannifin (6)	571.5	-7	2353.6	-7	13.2	-31	45.8	-57	2.3	3.1	4.8	36	0.96
Rubbermaid †	409.7	7	1667.3	9	38.6	17	162.7	13	9.4	8.6	18.4	32	1.02
Trinova	413.6	-17	1681.2	-14	-174.5	NM	-184.1	NM	NM	0.9	-49.1	NM	-6.52

(b) MACHINE & HAND TOOLS

GROUP COMPOSITE	2962.9	-2	10935.8	-5	46.0	46	38.9	-89	1.6	1.0	1.2	NM	0.17
Black & Decker	1345.5	1	4636.9	-4	31.9	372	53.0	4	2.4	0.5	6.2	32	0.81
Cincinnati Milacron	201.9	-6	754.0	-6	4.0	NM	-83.1	NM	2.0	NM	-34.5	NM	-3.04
Clark Equipment	294.2	-20	1190.2	-18	-32.9	NM	-93.3	NM	NM	1.4	-39.3	NM	-5.40
Danaher	223.7**	-1	837.4	-1	0.9	-48	13.3	-63	0.4	0.8	4.2	49	0.47
Snap-on Tools	217.8**	-3	881.6	-5	18.8	9	73.2	-27	8.6	7.7	11.2	21	1.75
SPX	167.2	3	673.5	-5	-1.9	NM	-19.4	NM	NM	NM	-10.3	NM	-1.40
Stanley Works	512.5	2	1962.2	-1	25.2	-2	95.1	-11	4.9	5.1	13.5	20	2.31

(c) SPECIAL MACHINERY

GROUP COMPOSITE	10813.7	-7	42804.6	-5	-231.9	NM	333.5	-79	NM	2.3	2.1	82	0.53
Applied Materials (2)	160.6	14	638.6	13	6.3	111	26.2	-23	3.9	2.1	8.1	30	1.52
Briggs & Stratton (6)	266.5	9	971.4	-3	18.1	62	43.9	5	6.8	4.6	15.2	17	3.03
Caterpillar	2458.0	-11	10182.0	-11	-318.0	NM	-404.0	NM	NM	0.4	-9.2	NM	-4.00
Deere (2)	1902.4**	-8	7055.2	-10	-81.5	NM	-20.2	NM	NM	3.6	-0.7	NM	-0.27
Dover	551.2	-3	2195.8	-1	30.9	-15	128.2	-18	5.6	6.4	15.5	19	2.15
FMC	1007.9	3	3899.4	5	30.2	12	173.1	11	3.0	2.8	69.4	10	4.77
General Signal	414.0	-1	1615.8	-5	18.6	NM	64.0	NM	4.5	NM	13.4	17	3.32
Harnischfeger Industries (2)	393.5	-19	1603.5	-10	18.6	-10	64.6	-8	4.7	4.3	10.9	10	2.08
Ingersoll-Rand	933.9	-3	3586.2	-4	54.7	20	150.6	-19	5.9	4.7	9.6	22	2.91
Interlake	178.8	-4	714.7	-9	-4.7	NM	-13.7	NM	NM	NM	NM	NM	-1.31
Joy Technologies (10)	159.7	-6	629.4	0	2.8	-61	14.1	24	1.8	4.2	1.3	NM	0.06
Pentair	295.6	1	1169.1	-1	13.7	26	41.1	25	4.6	3.7	15.1	14	3.30
Stewart & Stevenson Services (11)	186.6	8	669.3	0	9.3	15	32.1	3	5.0	4.7	15.7	25	2.14
Timken	388.1	-11	1647.4	-3	-36.2	NM	-35.7	NM	NM	0.5	-3.4	NM	-1.21
Tyco Laboratories (6)	758.4	-5	3076.6	20	23.1	-19	98.3	-14	3.0	3.6	10.3	18	2.12
Variety (11)	758.6	-19	3150.2	-10	-17.8	NM	-29.1	NM	NM	2.4	-12.4	NM	-1.87

(d) TEXTILES

GROUP COMPOSITE	3684.9	2	13926.0	-1	39.8	NM	18.2	NM	1.1	NM	0.4	34	0.77
Albany International	144.6**	-7	557.2	0	3.1	NM	10.3	35	2.2	0.1	4.2	48	0.41
Amoskeag	350.3**	1	1244.4	-2	1.0	NM	1.3	NM	0.3	NM	1.1	45	0.38
Burlington Holdings (3)	470.7	5	1948.1	-3	-7.1	NM	-36.3	NM	NM	NM	NM	NA	NA
Delta Woodside Industries (6)	165.3	24	663.8	25	8.0	72	34.8	229	4.8	3.5	11.6	11	1.66
DWG (8)	303.1	1	1223.5	-1	-4.7	NM	-22.7	NM	NM	NM	-26.6	NM	-0.88
Fieldcrest Cannon	343.0	2	1212.4	-2	2.4	NM	3.2	NM	0.7	NM	1.3	60	0.30
Interface	148.1	-11	581.8	-7	3.5	-39	8.9	-62	2.4	3.4	4.9	23	0.52
Shaw Industries (6)	410.7	-1	1618.9	-2	12.5	41	36.0	-40	3.1	2.1	10.0	40	1.23
Springs Industries	501.2	4	1890.4	1	11.9	8	27.1	NM	2.4	2.3	4.8	25	1.53
Unifi (6)	261.3	9	756.4	12	17.5	34	36.1	-13	6.7	5.4	10.0	28	1.30
Wickes (11)	586.6	-1	2229.0	-7	-8.3	NM	-80.5	NM	NM	NM	-9.2	NA	NA

16 METALS & MINING

INDUSTRY COMPOSITE	13543.3	-9	54475.8	-9	-1360.8	NM	-887.0	NM	NM	NM	-4.0	NM	-0.93
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(a) ALUMINUM

GROUP COMPOSITE	5767.9	-9	23641.1	-5	-140.8	NM	412.9	-65	NM	0.3	3.7	30	1.39
Aluminum Co. of America	2434.9	-10	9884.1	-8	-191.4	NM	62.7	-79	NM	NM	1.2	98	0.71
Amox	896.7	-5	3771.6	0	-10.0	NM	30.2	-87	NM	6.4	1.3	59	0.34
Kaiser Aluminum	471.3	-9	2000.8	-5	27.1	-47	108.4	-49	5.8	9.8	20.4	7	2.03
Maxxam	535.7	-7	2254.5	-5	9.8	-69	57.5	-60	1.8	5.5	12.8	7	6.08
Reynolds Metals	1429.3	-9	5730.1	-5	23.7	57	154.1	-48	1.7	1.0	5.2	22	2.60

(b) STEEL

GROUP COMPOSITE	5616.1	-11	22303.9	-12	-1217.5	NM	-1821.1	NM	NM	NM	-26.9	NM	-4.41
Allegheny Ludlum	231.9	-3	1004.6	-7	13.0	114	41.1	-40	5.6	2.5	11.4	29	1.25
Armco	408.5	-1	1595.3	-8	-241.5	NM	-336.5	NM	NM	NM	-46.3	NM	-3.89
Bethlehem Steel	1025.7	-15	4317.9	-12	-638.1	NM	-767.0	NM	NM	NM	-78.7	NM	-10.41
Commercial Metals (4)	261.4**	-10	1122.0	-1	2.8	-22	11.2	-50	1.1	1.2	5.5	22	1.04
Cyclops Industries	256.5	-13	1056.5	-12	-33.0	NM	-41.2	NM	NM	1.0	-64.9	NM	-5.79
Inland Steel Industries	847.0	-7	3404.5	-12	-191.3	NM	-275.1	NM	NM	NM	-24.3	NM	-9.88
Nucor	370.9	1	1465.5	-1	21.8	7	64.7	-14	5.9	5.6	9.4	31	3.00
Quanex (2)	151.5	11	588.9	-9	4.4	-52	12.4	-56	2.9	5.4	7.8	27	1.02
USX-U. S. Steel Group	1306.0	-19	4864.0	-20	-165.0	NM	-507.0	NM	NM	3.2	-30.5	NM	-10.00
Weirton Steel	280.2	-1	1036.3	-13	-6.6	NM	-74.7	NM	NM	NM	-30.7	NM	-3.49
Wheeling Pittsburgh	235.0	-14	957.3	-13	2.1	NM	4.7	NM	0.9	NM	1.9	27	0.27
Worthington Industries (7)	241.5	5	891.1	-4	13.9	7	46.3	-18	5.8	5.7	12.5	31	0.78

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CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12/31	PRICE- EARNINGS RATIO 2/21	12 MONTHS EARNINGS PER SHARE
	4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %			
OTHER METALS													
GROUP COMPOSITE	2159.3	-6	8530.9	-8	-2.6	NM	521.1	-54	NM	7.7	8.0	26	1.49
Asarco	492.4	-10	1909.9	-14	12.2	227	46.0	-69	2.5	0.7	3.1	24	1.12
Cyprus Minerals	405.5	-15	1678.8	-10	-28.9	NM	42.7	-62	NM	1.8	2.5	29	0.72
Columbia Copper	197.7	13	724.8	-4	-136.6	NM	-106.5	NM	NM	11.0	-20.4	NM	-3.76
Newmont Gold	144.9	-5	572.8	-11	33.4	32	125.9	-11	23.1	16.6	17.8	36	1.20
Newmont Mining	155.9	-5	622.8	-9	22.7	189	94.3	-44	14.6	4.8	62.1	32	1.39
Phelps Dodge	613.3	-4	2434.3	-8	75.2	-27	272.9	-40	12.3	16.2	14.7	11	7.86
Precision Castparts (9)	149.6	15	587.5	13	19.3	130	45.9	41	12.9	6.5	15.0	12	2.60
NONBANK FINANCIAL													
INDUSTRY COMPOSITE	67080.5	4	265337.0	5	3753.2	76	15542.0	35	5.6	3.3	13.2	12	3.78
FINANCIAL SERVICES													
GROUP COMPOSITE	30453.7	6	121552.0	7	1720.6	72	7624.3	41	5.7	3.5	16.9	12	3.58
Alexander & Alexander Services	360.3	2	1369.4	2	-35.2	NM	-10.4	NM	NM	5.6	-2.6	NM	-0.25
Allegheny	409.7	39	1417.0	16	-7.9	NM	21.7	-67	NM	4.3	3.1	36	3.40
American Express	6625.0**	5	25763.0	6	238.0	74	789.0	133	3.6	2.2	10.8	13	1.59
Bank of America (6)	698.0**	19	2526.6	6	77.4	359	232.5	126	11.1	2.9	24.1	9	2.20
Beneficial	451.9	-4	1809.9	3	38.4	19	148.8	14	8.5	6.8	12.9	11	5.80
Block (H&R) (8)	191.8	20	1231.1	17	-3.3	NM	139.1	16	NM	NM	24.4	27	1.30
Broad (3)	203.7**	0	814.3	2	14.4	49	46.8	18	7.1	4.7	9.4	13	1.40
Edward J. (A. G.) (10)	231.8**	49	850.7	32	27.2	120	91.8	68	11.7	8.0	19.8	13	2.58
Equifax	294.9	4	1093.8	1	15.8	101	54.1	-15	5.4	2.8	13.7	26	0.66
Federal Home Loan Mortgage Assn.	1076.0	4	4219.0	6	146.0	135	555.0	34	13.6	6.0	22.6	12	9.25
Federal National Mortgage Assn.	3401.5**	5	13585.7	7	367.0	19	1455.4	24	10.8	9.5	27.6	12	5.33
First Financial Management	430.7**	12	1507.1	18	33.6	25	89.0	22	7.8	7.0	9.0	16	2.88
First Security	3597.3**	13	13620.3	11	272.3	133	904.3	12	7.6	3.7	16.6	8	13.14
First Union	665.9**	0	2779.2	2	54.2	-1	305.5	0	8.1	8.2	28.5	18	4.18
Merrill Lynch	3122.3**	12	12362.8	11	170.7	463	696.1	263	5.5	1.1	18.0	9	6.02
Morgan Stanley Group	1787.5**	21	6785.1	16	132.3	127	475.1	76	7.4	3.9	21.7	10	5.93
Prudential	828.2**	19	3165.9	6	47.0	NM	150.7	NM	5.7	NM	19.8	8	3.15
Prudential	1853.1**	9	6608.2	7	132.1	34	478.8	28	7.1	5.8	15.3	9	4.27
Salomon	1554.0**	-19	9175.0	3	-29.0	NM	507.0	67	NM	NM	13.8	8	3.90
Swab (Charles)	223.1**	42	795.2	27	16.1	NM	49.5	195	7.2	0.6	27.2	24	1.27
Student Loan Marketing Assn.	748.8	-19	3257.4	-10	91.1	17	345.1	15	12.2	8.5	35.7	18	3.55
Transamerica	1698.1**	-3	6815.3	2	-77.5	NM	99.4	-63	NM	1.6	3.1	35	1.14
INSURANCE													
GROUP COMPOSITE	32792.2	4	127598.1	5	1854.9	33	7338.1	24	5.7	4.4	11.4	11	4.65
Aetna Life & Casualty	4636.7	-3	19195.6	-3	93.0	-34	505.2	-18	2.0	3.0	6.8	10	4.59
ALLAC	897.3	19	3282.7	23	41.6	24	148.7	27	4.6	4.5	16.1	17	1.82
American International Group	4228.3	4	15834.0	6	399.8	5	1553.0	8	9.5	9.4	14.1	12	7.28
American National Insurance	303.7	4	1197.4	9	27.7	-10	126.0	16	9.1	10.6	7.8	9	4.76
Amstar	740.7	3	2892.7	10	58.8	10	242.0	1	7.9	7.4	15.4	12	3.71
Capital Holding	722.0	-6	2670.7	4	66.6	11	250.2	51	9.2	7.8	15.2	11	5.33
Hubb	1189.7**	7	4578.8	7	139.3	-10	552.0	6	11.7	13.9	15.6	11	6.32
Signa	4776.0	0	18750.0	3	112.0	5	453.0	42	2.3	2.2	8.1	9	6.34
Transco	428.7**	82	1391.8	85	47.9	213	121.0	190	11.2	6.5	60.3	9	8.43
Teico	565.9**	15	2147.0	11	49.0	-11	196.4	-6	8.7	11.1	17.9	16	13.48
General Re	839.5	8	3206.6	9	184.2	18	656.7	7	21.9	20.0	18.3	12	7.46
Hartford Steam Boiler	163.5	10	630.4	12	15.0	-22	73.9	-6	9.2	13.1	18.5	14	3.53
Horace Mann Educators	169.1	5	657.2	4	10.5	443	24.9	NM	6.2	1.2	28.9	14	1.57
Jefferson-Pilot	301.8	1	1173.5	1	48.1	14	175.7	11	15.9	14.2	11.2	10	5.14
Temper	803.9	8	3137.1	7	43.9	-6	204.6	NM	5.5	6.3	11.5	8	4.25
Lincoln National	2570.3	3	9169.0	8	16.0	-73	208.4	9	0.6	2.4	8.2	12	4.60
INWNL	336.1**	4	1339.8	3	12.5	19	47.2	-10	3.7	3.2	8.2	9	3.43
Prison Capital	209.3**	28	837.3	7	16.2	617	44.7	75	7.7	1.4	21.3	6	5.86
Progressive	379.2**	11	1493.1	9	-13.7	NM	32.9	-65	NM	3.3	7.0	37	1.22
Protective Life	141.4**	31	515.9	32	11.0	24	35.8	27	7.8	8.2	14.8	9	2.62
Provident Life & Accident	773.3**	4	2846.2	3	55.7	11	117.2	-35	7.2	6.7	8.4	9	2.53
Rafeco	846.7**	6	3171.9	0	84.8	-9	259.6	-7	10.0	11.6	11.7	12	4.14
St. Paul	1141.2	6	4368.7	8	109.4	17	405.1	4	9.6	8.7	17.6	8	9.35
Workmark	487.3	6	1932.0	8	63.4	34	246.5	8	13.0	10.2	23.1	12	4.70
Travelers	2642.3	-5	11376.9	1	58.6	-54	307.4	NM	2.2	4.6	6.6	7	2.87
Unitrin	322.1	2	1255.3	3	45.0	1	137.2	4	14.0	14.2	7.3	13	2.58
UNUM	624.4	4	2420.6	12	49.6	10	205.0	11	7.9	7.5	14.9	12	6.15
USF&G	1036.0	28	4172.0	0	-16.0	NM	-144.0	NM	NM	NM	-20.0	NM	-2.15
USLife	371.6	15	1382.9	12	22.6	16	74.9	9	6.1	6.1	7.7	9	4.83
Washington National	144.2	3	571.1	-19	2.1	NM	-3.0	NM	1.5	NM	-1.1	NM	-0.33
SAVINGS & LOAN													
GROUP COMPOSITE	3834.7	-12	16186.8	-8	177.7	NM	859.6	243	4.6	NM	7.4	13	1.56
Chamson (H. F.)	1073.1**	-10	4592.1	-4	64.0	NM	245.8	29	6.0	0.0	9.3	9	2.06
CalFed	356.2**	-33	1716.7	-19	-73.4	NM	-131.9	NM	NM	NM	-13.1	NM	-5.15
Coast Savings Financial	203.4**	-23	899.0	-17	10.2	NM	41.7	NM	5.0	NM	15.0	4	2.74

Footnotes on page 67



The award winning T2200SX

If you need any more power than they

If your desire for power is on the scale of say, Louis XIV, consider the Toshiba T2200SX. Weighing a mere 5.5 pounds and taking up just half a briefcase, it possesses an awesome 20 MHz 386SX microprocessor and a 40, 60 or 80 MB hard drive with 2MB RAM expandable to 10 MB. And it's powerful enough to have grabbed both a PC/Computing MVP award and a PC Magazine Technical Excellence Award.



The new T3300SL

Maybe you should get into politics.

If your need for power is on the scale of say, Napoleon, consider the new T3300SL. It offers a 25MHz 386SL microprocessor plus 64 KB cache for blazing speed and longer battery life. Not to mention an 80 or 120MB drive and a PCMCIA-compatible slot. And like its cousin the T2200SX, it offers a Nickel Hydride battery and a carbon-fiber reinforced case. So call 1-800-457-7777. Or if you want even more power, don't forget it's an election year.

In Touch with Tomorrow
TOSHIBA

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12/31	PRICE- EARNINGS RATIO 2/21	12 MONTHS EARNING PER SHARE
	4TH QUARTER 1991	CHANGE FROM 1990	12 MONTHS 1991	CHANGE FROM 1990	4TH QUARTER 1991	CHANGE FROM 1990	12 MONTHS 1991	CHANGE FROM 1990	4TH QUARTER 1991	4TH QUARTER 1990			
	\$ MIL	%	\$ MIL	%	\$ MIL	%	\$ MIL	%	%	%			
Glenfed (6)	488.1**	7	1910.7	-21	20.5	NM	-98.5	NM	4.2	NM	-10.8	NM	-2.87
Golden West Financial	556.2	1	2241.5	5	63.6	51	238.6	32	11.4	7.6	16.5	11	3.76
Great Western Financial	936.2**	-11	3952.7	-6	71.5	NM	298.1	135	7.6	NM	14.2	8	2.25
Standard Federal Bank	221.4**	-3	874.2	-4	21.4	103	65.8	64	9.7	4.6	12.5	9	2.11

18 OFFICE EQUIPMENT & COMPUTERS

INDUSTRY COMPOSITE	58052.9	1	196268.4	1	9.7	-99	1959.7	-81	0.0	7.2	2.0	NM	0.41
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(a) BUSINESS MACHINES, SERVICES & SUPPLIES

GROUP COMPOSITE	4313.4	15	15336.4	11	223.1	14	695.6	18	5.2	5.2	14.4	20	1.54
Anacomp (3)	146.5	-7	624.9	-6	3.8	5	19.9	244	2.6	2.3	NM	12	0.43
Bell & Howell	172.2	1	624.9	2	3.8	-14	-5.1	NM	2.2	2.6	-36.3	NA	-8.03
CompuCom Systems	179.8	66	528.6	54	1.6	7	5.0	38	0.9	1.4	16.2	15	0.16
Deluxe	395.8	2	1474.5	4	52.7	-2	182.9	6	13.3	13.9	24.5	18	2.18
Diebold	145.2	13	506.2	6	14.6	58	35.7	32	10.1	7.2	9.3	21	2.70
Egghead (9)	175.3	35	638.8	26	6.3	-15	15.8	30	3.6	5.7	12.2	28	0.93
HON Industries	169.5	0	607.7	8	11.5	-9	32.9	-24	6.8	7.5	22.8	19	1.02
Inteligent Electronics (2)	600.3	52	1913.9	31	9.6	4	38.2	31	1.6	2.3	13.9	25	1.11
Merisel	466.9	31	1585.4	33	5.8	NM	10.8	NM	1.2	0.1	8.6	28	0.43
MicroAge (3)	246.2**	28	841.5	26	1.3	-20	2.9	-53	0.5	0.9	8.3	22	0.67
Miller (Herman) (7)	206.1	-12	803.3	-11	5.6	-49	0.4	NM	2.7	4.7	0.1	NM	0.02
Pitney Bowes	905.9	5	3332.5	4	82.6	9	287.9	39	9.1	8.8	16.0	19	3.60
Reynolds & Reynolds (3)	143.8	-5	591.7	-3	7.6	69	25.6	13	5.3	3.0	10.1	16	2.41
Standard Register	183.9	-2	693.7	-3	13.0	NM	32.7	50	7.1	NM	10.1	15	1.14
Tech Data (11)	175.9	52	568.8	35	3.3	62	10.0	296	1.9	1.7	11.0	24	1.57

(b) COMPUTERS & PERIPHERALS

GROUP COMPOSITE	47502.7	-2	158924.7	-1	-786.0	NM	-664.9	NM	NM	7.4	-1.2	NM	-0.36
AM International (5)	157.7	-27	800.8	-11	-5.8	NM	1.3	NM	NM	0.8	-3.1	NM	-0.11
Amdahl	389.9	-40	1702.5	-21	-18.9	NM	4.4	-98	NM	9.5	0.3	NM	0.04
Apple Computer (3)	1862.6	11	6496.0	13	166.0	10	325.4	-35	8.9	9.0	16.9	24	2.66
AST Research (6)	239.1	48	827.3	41	16.7	2	70.2	34	7.0	10.1	21.6	9	2.23
Commodore International (6)	371.6	-3	1038.5	4	40.1	10	59.3	48	10.8	9.5	19.6	8	1.77
Compaq Computer	873.4	13	3271.4	-9	66.6	-51	130.9	-71	7.6	13.5	7.0	20	1.49
Conner Peripherals	417.0	0	1599.0	20	13.3	-72	92.5	-29	3.2	11.3	13.4	13	1.57
Control Data	402.9	-6	1524.9	-10	-15.2	NM	-8.6	NM	NM	NM	-2.1	NM	-0.21
Cray Research	316.5	24	862.5	7	59.6	79	113.0	0	18.8	13.1	14.9	11	4.01
Data General (3)	294.8	-5	1211.9	-2	4.0	-68	77.2	NM	1.4	4.0	15.3	5	2.30
Dell Computer (11)	229.3	68	771.5	58	13.0	90	44.1	124	5.7	5.0	17.2	17	1.92
Digital Equipment (6)	3479.5	4	14237.8	9	-138.3	NM	-864.5	NM	NM	3.3	-11.6	NM	-7.00
Hewlett-Packard (2)	3832.0	7	14494.0	10	125.0	-38	755.0	2	3.3	5.6	10.4	25	3.02
International Business Machines	22082.0	-4	64792.0	-6	-1382.0	NM	-564.0	NM	NM	10.7	-1.5	NM	-0.99
Maxtor (9)	252.9	-3	961.0	22	4.0	NM	-65.8	NM	1.6	NM	-54.8	NM	-2.61
Quantum (9)	286.6	24	1073.6	50	9.4	-48	49.6	-26	3.3	7.8	17.7	16	1.12
Seagate Technology (6)	695.1	0	2668.7	0	11.0	-52	-11.1	NM	1.6	3.3	-1.5	NM	-0.17
Silicon Graphics (6)	188.0	38	637.9	32	14.2	37	36.8	-8	7.6	7.6	9.3	42	0.66
Storage Technology	475.9	8	1584.9	3	36.5	-1	93.1	-1	7.7	8.4	12.8	31	2.33
Sun Microsystems (6)	909.1	21	3454.7	25	47.4	21	199.3	32	5.2	5.2	15.0	17	1.93
Tandem Computers (3)	454.5	2	1932.9	3	-94.6	NM	-66.5	NM	NM	1.6	-5.7	NM	-0.61
Tandy (6)	1467.2**	-1	4514.7	-2	78.8	-20	176.2	-32	5.4	6.7	9.4	14	2.19
Unisys	2462.1	-16	8696.1	-14	80.5	NM	-1393.3	NM	3.3	NM	NM	NM	-9.37
Wang Laboratories (6)	495.9	-9	1940.1	-18	-8.4	NM	-373.4	NM	NM	NM	NM	NM	-2.24
Xerox	4867.0**	-3	17830.0	-1	91.0	-63	454.0	-25	1.9	4.9	8.6	20	3.91

(c) COMPUTER SOFTWARE & SERVICES

GROUP COMPOSITE	6236.8	21	22007.3	16	572.5	76	1929.0	25	9.2	6.3	19.0	32	1.58
Automatic Data Processing (6)	449.3**	6	1810.8	4	60.4	13	238.9	9	13.4	12.5	20.7	27	1.72
Comdisco (3)	553.0**	5	2200.0	10	20.0	-9	81.0	-1	3.6	4.2	12.3	9	2.10
Computer Associates International (9)	455.1	19	1437.8	10	76.2	20	173.0	7	16.7	16.7	16.1	16	0.96
Computer Sciences (9)	544.6	25	1944.7	16	16.1	-3	65.5	-4	3.0	3.8	11.3	20	3.99
Electronic Data Systems	2086.9	24	7028.5	17	155.9	17	563.0	13	7.5	7.9	21.6	24	2.35
Intergraph	312.5	3	1195.4	14	16.5	-13	71.1	14	5.3	6.2	9.9	13	1.47
Lotus Development	249.2	32	828.9	20	5.8	NM	43.1	85	2.3	NM	11.7	34	0.98
Microsoft (6)	681.9	48	2275.9	54	175.2	55	581.4	63	25.7	24.5	32.8	38	3.03
Novell (2)	187.2	33	640.1	29	50.6	55	162.5	72	27.0	23.2	27.1	56	1.10
Oracle Systems (7)	283.9	11	1085.2	6	13.6	NM	33.6	-8	4.8	NM	9.0	86	0.24
Safeguard Scientifics	216.8	57	644.2	43	2.6	-16	11.5	-26	1.2	2.3	12.8	7	2.25
Western Digital (6)	216.3	-6	915.9	-14	-20.4	NM	-95.7	NM	NM	NM	-65.0	NM	-3.28

19 PAPER & FOREST PRODUCTS

INDUSTRY COMPOSITE	19300.3	-3	77463.6	-4	-134.5	NM	1314.9	-61	NM	2.1	3.5	42	0.99
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(a) FOREST PRODUCTS

GROUP COMPOSITE	6832.7	-2	27882.7	-6	-315.1	NM	-157.7	NM	NM	1.9	-1.7	NM	-0.44
Boise Cascade	963.2	-5	3950.5	-6	-15.8	NM	-79.5	NM	NM	0.5	-8.1	NM	-2.46
Georgia-Pacific	2792.0	-9	11524.0	-9	-67.0	NM	-79.0	NM	NM	2.0	-2.7	NM	-0.92
Louisiana-Pacific	405.2	11	1702.1	-5	8.8	NM	55.9	-39	2.2	NM	4.6	38	1.55
Weyerhaeuser	2128.9	2	8701.6	-4	-256.4	NM	-100.9	NM	NM	2.8	-2.6	NM	-0.50
Willamette Industries	543.5	18	2004.5	5	15.2	24	45.8	-65	2.8	2.7	4.6	44	1.80

CORPORATE SCOREBOARD

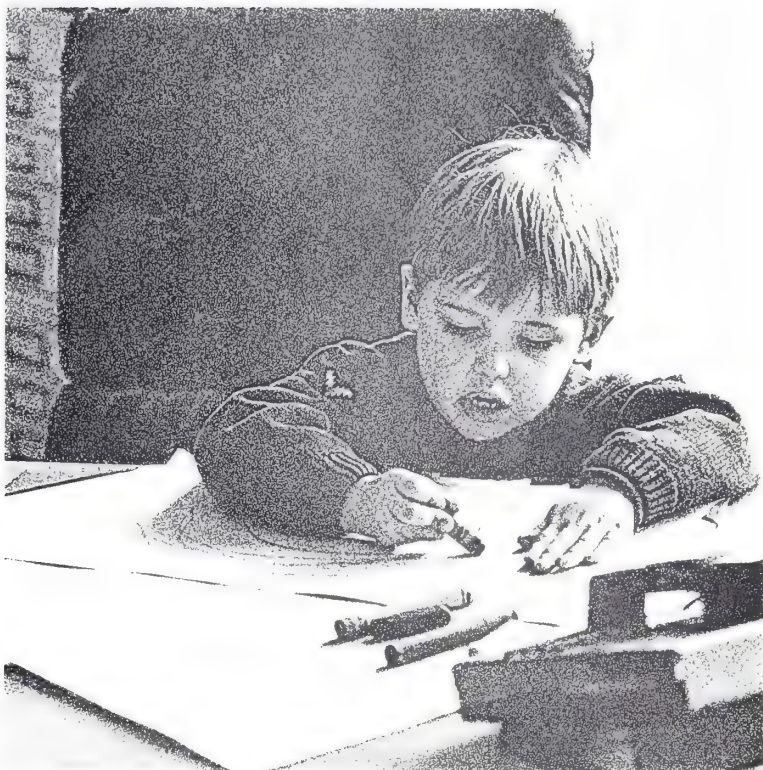
COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12-31	PRICE- EARNINGS RATIO 2:1	12 MONTHS' EARNINGS PER SHARE	
	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %				
PAPER														
GROUP COMPOSITE	12467.5	-3	49581.0	-4	180.7	-36	1472.6	-36	1.5	2.2	5.7	25	1.63	
Bowater	325.9	-8	1288.5	-7	1.6	-92	45.6	-48	0.5	5.2	4.3	23	1.15	
Champion International	1214.8	-3	4786.4	-6	10.5	-61	40.3	-82	0.9	2.2	0.3	NM	0.14	
Chesapeake	203.8	2	840.5	0	5.7	217	15.4	-8	2.8	0.9	4.8	38	0.75	
Consolidated Papers	204.1	-13	871.9	-8	21.5	-29	91.4	-36	10.5	12.9	9.5	20	2.10	
Fort Howard	273.6	-6	1138.2	-1	-35.9	NM	-105.5	NM	NM	NM	NM	NA	-19.94	
Glatfelter (P. H.)	141.4	-11	567.8	-9	20.6	-21	76.0	-14	14.6	16.4	17.2	17	3.34	
International Paper	3200.0	-3	12688.0	-2	66.0	187	399.0	-30	2.1	0.7	7.1	22	3.61	
James River Corp. of Virginia	1104.3	-11	4561.7	-16	7.8	-88	78.3	0	0.7	5.0	2.4	33	0.66	
Kimberly-Clark	1726.9	5	6776.9	6	138.7	25	508.3	18	8.0	6.8	20.2	16	3.18	
Mead	1094.8	-4	4579.3	4	18.2	NM	75.6	-29	1.7	NM	4.9	29	1.29	
Potlatch	303.9	5	1237.0	-1	16.2	255	55.8	-43	5.3	1.6	6.1	23	1.92	
Scott Paper	1322.9	-8	4976.5	-7	-157.7	NM	-69.9	NM	NM	NM	-3.3	NM	-0.95	
Union Camp	745.7	4	2967.1	4	20.0	-62	124.8	-46	2.7	7.3	6.5	30	1.80	
Westvaco (2)	605.4	-7	2301.2	-5	47.6	-1	137.4	-27	7.9	7.4	8.1	18	2.10	
PUBLISHING & BROADCASTING														
INDUSTRY COMPOSITE	15195.1	2	54957.1	0	811.9	197	2218.1	-8	5.3	1.8	5.8	53	0.90	
BROADCASTING														
GROUP COMPOSITE	3960.7	4	13954.2	1	205.2	NM	483.5	-24	5.2	NM	9.2	62	0.79	
American TV & Communications	310.8	9	1220.1	10	44.5	35	160.9	34	14.3	11.6	25.0	40	1.47	
Capital Cities/ABC	1559.6	1	5382.0	0	134.4	-15	374.7	-22	8.6	10.2	10.4	19	22.33	
CBS	937.4	2	3035.0	-7	9.4	NM	-98.7	NM	1.0	NM	-31.3	NM	-6.11	
Gaylord Entertainment	144.0	5	600.9	4	3.0	NM	1.8	-73	2.1	NM	0.9	NM	0.05	
Multimedia	143.2	13	524.3	9	14.5	-15	48.4	-1	10.2	13.4	NM	21	1.30	
Turner Broadcasting System	402.4	13	1480.2	6	28.2	NM	42.9	NM	7.0	NM	NM	NM	0.06	
Viacom	463.3	8	1711.6	7	-28.8	NM	-46.6	NM	NM	NM	-6.4	NM	-0.41	
PUBLISHING														
GROUP COMPOSITE	11234.5	2	41002.9	0	606.7	52	1734.7	-1	5.4	3.0	5.1	49	0.95	
Commerce Clearing House	167.2	0	704.2	-2	1.0	286	31.0	-24	0.6	0.2	13.7	25	0.89	
Dow Jones	456.1	3	1725.1	0	3.5	-85	72.2	-32	0.8	5.3	5.0	48	0.71	
Dun & Bradstreet	1255.2	-4	4642.8	-4	153.4	13	508.5	0	12.2	10.3	24.6	19	2.85	
Gannett	901.2	0	3382.0	-2	97.0	-17	301.6	-20	10.8	13.0	20.3	23	2.00	
Knight-Ridder	588.5	0	2237.3	-3	46.4	10	132.1	-11	7.9	7.1	11.8	22	2.55	
McGraw-Hill	568.1	2	1943.0	0	45.4	-12	148.0	-14	8.0	9.2	15.5	20	3.03	
Media General	148.0	-5	585.9	-5	9.2	198	-62.1	NM	6.2	2.0	-30.8	NM	-2.39	
Meredith (6)	181.3	-5	728.8	-1	4.7	189	19.9	NM	2.6	0.9	6.0	23	1.19	
New York Times	452.5	-1	1703.1	-4	34.6	182	47.0	-28	7.6	2.7	4.4	47	0.61	
Readers Digest Association (6)	712.4	10	2465.2	12	62.8	13	220.8	16	8.8	8.6	30.0	25	1.84	
Scripps (E. W.)	353.8	2	1299.6	0	24.9	18	64.6	35	7.0	6.1	9.8	29	0.87	
Time Warner	3390.0	3	12021.0	4	45.0	NM	-99.0	NM	1.3	NM	-8.2	NM	-9.60	
Times Mirror	975.8**	2	3624.1	0	-13.0	NM	82.0	-55	NM	4.8	4.3	58	0.64	
Tribune	526.4	0	2034.7	-14	32.7	NM	142.0	NM	6.2	NM	25.8	23	1.94	
Washington Post	366.6	-1	1380.3	-4	47.0	12	118.7	-32	12.8	11.4	12.7	23	10.00	
Western Publishing Group (11)	191.5**	23	525.8	4	12.3	48	7.4	-56	6.4	5.4	3.3	56	0.32	
SERVICE INDUSTRIES														
INDUSTRY COMPOSITE	18579.3	7	69097.9	9	625.5	-14	2336.8	-13	3.4	4.2	11.8	28	1.20	
CONSTRUCTION & ENGINEERING														
GROUP COMPOSITE	4969.0	-4	19820.3	3	169.9	164	396.9	70	3.4	1.2	11.9	23	1.52	
Apogee Enterprises (10)	161.4	3	600.4	-1	0.3	-94	10.3	-43	0.2	3.0	9.0	16	0.76	
Atkinson (G. F.)	179.8	-16	684.0	-23	0.4	NM	1.2	NM	0.2	NM	1.1	55	0.14	
EG&G	640.1	4	2688.5	9	23.7	13	81.2	10	3.7	3.4	20.9	18	2.91	
Fluor (2)	1669.0	-15	6741.7	-9	45.9	13	149.1	7	2.8	2.1	14.6	24	1.83	
Foster Wheeler	554.4	7	1992.0	20	12.5	12	43.3	13	2.2	2.1	8.4	24	1.22	
Granite Construction	149.8	-6	564.1	1	4.4	-35	17.6	-6	2.9	4.2	11.7	18	1.51	
Jacobs Engineering Group (3)	253.7	-4	1025.8	10	5.7	21	21.4	35	2.3	1.8	20.0	38	0.90	
McDermott International (9)	834.1	3	3543.8	20	71.2	NM	37.6	NM	8.5	NM	6.8	26	0.84	
Morrison Knudsen	526.8**	13	1980.0	16	5.8	-49	35.1	-4	1.1	2.4	9.5	19	2.60	
INDUSTRIAL DISTRIBUTION														
GROUP COMPOSITE	4105.4	8	15040.0	6	150.1	17	506.5	-6	3.7	3.4	11.4	24	1.43	
Arrow Electronics	346.5	47	1043.7	7	7.8	309	8.7	-14	2.2	0.8	2.0	56	0.28	
Avnet (6)	415.1	-5	1694.1	-4	11.8	-24	51.2	-10	2.8	3.5	6.3	18	1.44	
Bearings (6)	198.6	-2	805.5	8	0.4	-45	3.9	-30	0.2	0.3	2.9	39	0.56	
Genuine Parts	842.8	6	3434.6	3	59.6	7	207.7	1	7.1	7.0	19.0	17	2.72	
Getty Petroleum (11)	283.5	-10	1198.7	1	-1.2	NM	-6.3	NM	NM	NM	-7.6	NM	-0.50	
Grainger (W. W.)	519.7	6	2077.2	7	34.8	1	127.7	1	6.7	7.0	14.8	22	2.37	
Kaman	200.7**	-5	780.4	-5	4.1	-22	17.0	-12	2.0	2.5	8.5	10	0.93	
Office Depot	341.0	31	1300.8	44	6.7	102	14.4	25	2.0	1.3	7.3	97	0.54	
Premier Industrial (7)	161.4	-1	631.7	-1	20.2	2	73.1	-5	12.5	12.2	22.7	24	1.27	
Staples (11)	144.5	83	452.7	71	2.6	104	2.3	-57	1.8	1.6	1.7	NM	0.16	
United Stationers (4)	247.3	1	953.0	-4	2.8	6	10.1	-14	1.1	1.1	5.5	20	0.65	
Univar (10)	404.1	14	1467.6	5	0.6	-88	-3.3	NM	0.1	1.3	-2.0	NM	-0.16	

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CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12-31	PRICE- EARNINGS RATIO 2-21	12 MONTHS' EARNINGS PER SHARE
	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %			
(c) POLLUTION CONTROL													
GROUP COMPOSITE	3361.2	4	12749.5	17	79.7	-74	725.9	-36	2.4	9.5	11.4	41	0.83
Air & Water Technologies (2)	178.9	0	657.5	8	0.7	-74	-25.9	NM	0.4	1.5	-11.5	NM	-1.15
Browning-Ferris Industries (3)	801.3	0	3182.8	4	40.3	-34	44.6	-82	5.0	7.6	3.9	81	0.28
Chemical Waste Management	370.5	-5	1358.3	18	12.2	-74	100.8	-43	3.3	12.3	11.5	41	0.49
Waste Management	2010.4	8	7550.9	25	26.5	-86	606.3	-15	1.3	10.5	14.7	35	1.23
(d) PRINTING & ADVERTISING													
GROUP COMPOSITE	2533.3	10	8648.6	12	135.9	2	408.6	-2	5.4	5.7	14.0	20	2.35
Advo-System (3)	186.6	16	723.4	11	4.8	7	19.6	14	2.6	2.8	23.0	23	1.07
Banta	147.5	3	565.5	-2	7.5	12	28.2	-4	5.1	4.6	12.4	15	2.16
Donnelley (R. R.) & Sons	1138.3	2	3914.8	12	68.5	1	204.9	-9	6.0	6.1	12.3	19	2.64
Grey Advertising	161.5	12	531.3	10	-5.7	NM	4.3	-70	NM	2.7	3.9	33	3.51
Interpublic Group	523.2**	23	1677.5	23	40.5	25	94.6	18	7.7	7.6	18.8	22	2.60
Omnicom Group	376.2	16	1236.2	5	20.2	19	57.1	10	5.4	5.3	17.8	17	2.08
(e) OTHER SERVICES													
GROUP COMPOSITE	3610.4	26	12039.5	13	89.8	-5	298.9	-17	2.5	3.3	10.7	22	1.08
Adia Services	166.4**	1	643.7	-3	2.5	-4	8.4	-52	1.5	1.5	4.5	32	0.67
American Building Maintenance (2)	192.1	9	738.8	9	3.7	15	11.1	13	1.9	1.8	12.4	14	2.73
CDI	196.7	-11	768.1	-17	-2.3	NM	-7.6	NM	NM	0.7	-7.1	NM	-0.39
Handleman (8)	278.9	28	784.1	5	12.6	9	24.9	-28	4.5	5.3	10.1	19	0.76
InaCom	252.6	104	680.4	59	2.3	-5	3.4	-51	0.9	1.9	3.9	25	0.56
JWP	1162.6	49	3594.4	27	16.1	0	60.3	2	1.4	2.1	13.9	12	1.54
Kelly Services	382.4	6	1437.9	-2	9.1	-44	38.6	-46	2.4	4.5	11.1	29	1.28
Olsten	221.6**	33	843.5	35	4.4	NM	14.6	17	2.0	0.1	12.9	31	0.93
Pinkerton's	208.2	15	637.8	9	5.3	47	12.6	34	2.5	2.0	12.1	20	1.66
Safety-Kleen	222.6	15	695.0	18	13.9	-30	51.6	-7	6.2	10.3	11.5	30	0.90
Service Corp. International	181.2	25	643.2	14	20.2	34	73.4	15	11.2	10.5	12.7	17	1.54
Wackenhut	145.1	8	572.5	10	2.2	5	7.7	11	1.5	1.6	18.9	14	2.00
22 TELECOMMUNICATIONS													
INDUSTRY COMPOSITE	44651.2	3	171026.3	3	2211.2	-30	10652.3	-28	5.0	7.2	10.0	21	1.87
(a) EQUIPMENT & SERVICES													
GROUP COMPOSITE	17013.4	2	64476.6	4	792.3	-3	1150.4	-70	4.7	4.9	5.0	59	0.59
American Telephone & Telegraph	11945.0	1	44651.0	2	635.0	-22	522.0	-83	5.3	6.8	3.2	94	0.40
Communications Satellite	141.3	21	522.9	14	15.7	NM	71.4	NM	11.1	NM	12.2	11	3.75
McCaw Cellular Communications	379.2	27	1365.6	32	-125.3	NM	-351.1	NM	NM	NM	-20.1	NM	-2.04
MCI Communications	2162.0	8	8433.0	10	144.0	13	551.0	84	6.7	6.3	18.7	17	2.01
Pacific Telecom	188.6	-11	724.4	6	24.8	-10	89.5	-6	13.2	12.9	15.1	11	2.27
Sprint	2197.3	2	8779.7	5	98.1	39	367.5	19	4.5	3.3	14.8	13	1.68
(b) TELEPHONE COMPANIES													
GROUP COMPOSITE	27637.8	3	106549.6	2	1418.9	-39	9401.9	-11	5.1	8.7	11.5	17	2.57
Alltel	457.5	13	1747.8	11	48.6	-13	189.0	-2	10.6	13.8	17.5	16	2.34
Ameritech	2742.5	2	10818.4	1	199.2	-31	1165.5	-7	7.3	10.6	14.4	14	4.39
Bell Atlantic	3098.6	0	12279.7	0	266.3	13	1331.6	1	8.6	7.6	14.2	13	3.41
BellSouth	3694.5	1	14445.5	1	386.9	7	1506.9	-8	10.5	9.9	11.5	15	3.11
Centel	298.7	5	1180.5	3	25.7	158	112.4	139	8.6	3.5	9.6	34	1.31
Cincinnati Bell	271.8	-4	1087.9	7	16.3	-36	42.7	-53	6.0	8.9	6.7	30	0.63
GTE	5229.0	7	19621.0	2	481.0	11	1529.0	-6	9.2	8.9	14.0	18	1.69
Nynex	3243.1	-6	13228.8	-3	-251.3	NM	600.8	-37	NM	1.8	6.3	24	2.98
Pacific Telesis Group	2466.0	1	9895.0	2	158.0	-19	1015.0	-1	6.4	8.0	13.1	16	2.58
Rochester Telephone	194.6	23	703.2	17	16.8	29	73.3	47	8.6	8.2	12.9	13	2.36
Southern New England Telecomms.	409.8**	1	1632.8	1	33.6	-6	125.9	-5	8.2	8.8	10.8	16	2.06
Southwestern Bell	2522.4	3	9331.9	2	316.2	18	1156.5	5	12.5	10.9	13.2	15	3.85
US West	3009.3	14	10577.2	6	-278.4	NM	553.4	-54	NM	13.2	5.8	25	1.38
23 TRANSPORTATION													
INDUSTRY COMPOSITE	29684.0	4	114420.1	3	-1210.1	NM	-1420.8	NM	NM	NM	-5.0	NM	-1.06
(a) AIRLINES													
GROUP COMPOSITE	12928.4	9	50469.0	6	-598.9	NM	-1598.7	NM	NM	NM	-28.1	NM	-5.44
Alaska Air Group	264.6	3	1104.0	5	-0.9	NM	10.3	-40	NM	NM	1.3	82	0.27
America West Airlines	326.7	-6	1416.9	8	-47.8	NM	-213.8	NM	NM	NM	NM	NM	-10.00
AMR	3404.5	13	12887.2	10	-124.9	NM	-239.9	NM	NM	NM	-6.1	NM	-3.54
Continental Airlines Holding	1379.0	0	5551.0	11	4.4	NM	-305.7	NM	0.3	NM	NM	NM	-6.74
Delta Air Lines (6)	2623.2	23	10019.6	15	-187.6	NM	-239.5	NM	NM	NM	-12.8	NM	-5.51
Southwest Airlines	350.9	16	1313.6	11	8.8	NM	26.9	-43	2.5	NM	4.3	65	0.63
UAL	2910.8	4	11662.6	6	-252.6	NM	-331.9	NM	NM	NM	-18.0	NM	-14.31
USAir Group	1668.7	0	6514.1	-1	1.6	NM	-305.3	NM	0.1	NM	-31.6	NM	-7.62
(b) RAILROADS													
GROUP COMPOSITE	8005.9	2	30897.5	1	-802.1	NM	-353.2	NM	NM	6.6	-2.1	NM	-0.49
Burlington Northern	1192.0	2	4559.0	-2	54.0	42	-306.0	NM	4.5	3.3	-25.5	NM	-3.96
Consolidated Rail	847.0	1	3252.0	-4	-376.0	NM	-207.0	NM	NM	9.0	-7.9	NM	-5.39
CSX	2276.0	4	8636.0	5	-356.0	NM	-76.0	NM	NM	5.9	-2.0	NM	-0.75
Kansas City Southern Industries	160.4**	15	610.2	16	13.7	46	45.7	10	8.5	6.8	11.5	17	4.31

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Two reasons to choose the Quiet Company.

1. Keeping your business in the family.
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Mutual Life®**
The Quiet Company®

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12-31	PRICE- EARNINGS RATIO 2-21	12 MONTHS' EARNINGS PER SHARE
	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 *\$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %			
Norfolk Southern	1104.9	-2	4451.3	-4	-354.6	NM	29.7	-95	NM	10.4	0.7	NM	0.20
Santa Fe Pacific	624.6	9	2360.0	3	32.8	NM	96.4	NM	5.3	NM	9.3	22	0.54
Union Pacific	1801.0	-1	7029.0	1	184.0	5	64.0	-90	10.2	9.7	1.6	NM	0.31
(c) TRANSPORTATION SERVICES GROUP COMPOSITE	4546.4	-2	17788.3	0	75.4	-5	146.8	-57	1.7	1.7	3.2	50	0.69
Air Express International	164.9	6	601.9	6	4.5	40	13.9	26	2.8	2.1	23.3	16	1.82
Airborne Freight	359.2	13	1367.0	16	6.6	12	30.0	-11	1.9	1.9	9.7	20	1.40
Federal Express (7)	1943.4	-3	7547.9	0	26.5	-29	-30.9	NM	1.4	1.9	-1.8	NM	-0.59
PHH (8)	462.2	-8	2004.1	1	10.6	1	46.4	-13	2.3	2.1	11.4	13	2.74
Ryder System	1315.0	-1	5061.1	-2	21.1	76	65.7	-20	1.6	0.9	4.1	33	0.75
Trinity Industries (9)	301.8	-16	1206.2	-7	6.0	-43	21.6	-31	2.0	2.9	6.3	30	1.02
(d) TRUCKING & SHIPPING GROUP COMPOSITE	4203.3	3	15265.3	4	115.5	2	384.3	17	2.7	2.8	8.8	22	1.65
Alexander & Baldwin	191.9	6	720.7	7	28.2	21	92.4	-20	14.7	12.9	12.6	14	2.00
American President	668.3**	6	2448.7	8	11.6	483	64.0	NM	1.7	0.3	12.6	9	3.65
Carolina Freight	246.6	3	769.2	4	-0.5	NM	1.6	-34	NM	0.3	1.2	82	0.23
Consolidated Freightways	1006.3	-8	4082.3	-3	-6.7	NM	-40.4	NM	NM	NM	-9.7	NM	-1.52
GATX	262.5**	9	989.1	14	21.1	-13	82.7	0	8.0	10.0	11.7	8	3.56
Hunt (J. B.) Transport Services	199.0	25	734.3	27	8.9	32	30.1	0	4.5	4.3	14.4	23	1.30
Roadway Services	1053.5	10	3177.0	7	51.5	14	127.3	7	4.9	4.7	15.1	23	3.27
Yellow Freight System	575.1	0	2344.1	2	1.4	-89	26.7	-59	0.2	2.3	5.6	34	0.95
24 UTILITIES & POWER													
INDUSTRY COMPOSITE	51473.1	1	201751.1	4	2406.7	-20	15221.3	-7	4.7	5.9	9.0	16	1.87
(a) ELECTRIC, WATER & COGENERATION GROUP COMPOSITE	38049.8	5	154365.8	5	2250.2	-16	15129.6	-1	5.9	7.4	10.1	14	2.14
Allegheny Power System	572.1	2	2282.2	-1	50.1	-3	212.6	1	8.8	9.2	11.6	12	3.61
American Electric Power	1262.0	-1	5047.0	-3	128.4	5	551.5	0	10.2	9.6	11.8	11	2.70
Baltimore Gas & Electric	595.6	13	2459.5	12	16.7	NM	233.7	33	2.8	NM	8.9	14	2.28

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COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12/31	PRICE- EARNINGS RATIO 2/21	12 MONTHS' EARNINGS PER SHARE
	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %			
Boston Edison	329.7	1	1319.7	5	12.8	28	94.7	19	3.9	3.1	10.2	12	1.96
Carolina Power & Light	624.9	-1	2685.8	3	59.1	120	377.0	34	9.5	4.2	14.7	12	4.53
Centerior Energy	590.2	3	2560.3	5	70.4	-5	297.9	-9	11.9	12.9	8.3	11	1.71
Central & South West	793.0	18	3058.0	11	63.0	24	401.0	4	7.9	7.6	13.2	13	3.99
Cincinnati Gas & Electric	395.4	3	1518.1	6	34.6	-47	207.0	-12	8.8	17.1	11.5	11	3.32
Commonwealth Edison	1480.4	12	6275.6	18	-429.6	NM	94.9	-26	NM	6.5	0.3	NM	0.08
Consolidated Edison Co. of N. Y.	1342.7	-2	5873.1	2	92.2	-24	566.9	-1	6.9	8.9	11.4	11	2.32
Detroit Edison	869.8	3	3591.5	0	135.9	22	568.0	10	15.6	13.2	19.2	9	3.64
Dominion Resources	916.5	10	3785.7	7	97.5	12	511.6	2	10.6	10.5	12.0	12	2.94
DPL	260.6	1	1005.5	5	18.5	-46	129.0	-21	7.1	13.2	11.1	14	1.73
DQE	289.4	7	1199.5	6	30.9	-3	144.4	6	10.7	11.7	12.0	11	2.50
Duke Power	920.2	8	3817.0	3	100.0	24	583.6	8	10.9	9.5	13.0	12	2.60
Entergy	922.0	0	4051.4	2	127.8	49	544.8	1	13.9	9.3	11.4	11	2.64
Florida Progress	500.6	4	2074.7	3	31.1	-18	191.3	-3	6.2	7.9	11.0	14	3.24
PL Group	1181.3	-6	5249.5	3	52.6	26	417.4	22	4.5	3.3	11.2	15	2.31
General Public Utilities	818.4	7	3371.6	9	5.0	-91	311.8	-1	0.6	7.3	9.5	10	2.49
Gulf States Utilities	412.2	1	1702.2	1	20.0	425	122.4	NM	4.9	0.9	3.0	24	0.52
Hawaiian Electric Industries	262.5	-5	1083.8	7	15.7	333	61.7	22	6.0	1.3	9.6	15	2.40
Houston Industries	1095.4	9	4443.7	6	64.7	-12	463.6	20	5.9	7.3	11.8	12	3.28
Illinois Power	366.0	0	1474.9	0	17.2	NM	109.2	NM	4.7	NM	5.3	21	1.04
Kansas Power & Light	297.7	14	1162.2	1	32.6	77	89.6	13	10.9	7.1	13.2	12	2.41
Long Island Lighting	601.6	7	2548.9	4	24.6	-32	305.5	-4	4.1	6.5	11.0	10	2.15
Midwest Resources	269.3	14	1024.9	11	14.8	28	73.8	9	5.5	4.9	10.9	15	1.36
New England Electric System	524.4	7	2094.4	10	45.1	28	190.4	-30	8.6	7.2	12.6	11	2.77
New York State Electric & Gas	389.2	8	1555.8	4	23.0	4	168.6	7	5.9	6.1	10.6	12	2.36
Niagara Mohawk Power	848.6	9	3382.5	7	35.1	NM	243.4	194	4.1	NM	9.6	12	1.49
Nipco Industries	429.0	1	1535.2	1	44.5	3	145.1	5	10.4	10.2	12.9	12	1.94
Northeast Utilities	722.8	10	2753.8	5	60.0	22	279.3	9	8.3	7.5	12.6	12	2.12
Northern States Power	533.5	7	2201.2	7	37.1	15	207.1	7	7.0	6.5	12.0	13	3.02
Ohio Edison	577.6	1	2358.9	5	59.0	68	272.5	-7	10.2	6.1	10.1	12	1.60
Oklahoma Gas & Electric	284.6	2	1314.8	7	12.3	-40	133.9	-4	4.3	7.3	14.5	12	3.27
Pacific Gas & Electric	2635.0	7	9778.1	3	246.9	14	1026.4	4	9.4	8.8	12.4	14	2.24
PacifiCorp	1122.4	3	4007.0	4	164.6	20	507.2	7	14.7	12.6	14.1	12	1.86

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Reminder That We've

CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12/31	PRICE- EARNINGS RATIO 2/21	12 MONTHS' EARNINGS PER SHARE
	4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %			
Pennsylvania Power & Light	655.5	5	2559.7	6	84.7	-2	348.4	1	12.9	13.9	13.3	12	4.01
Philadelphia Electric	959.7	5	3975.8	7	92.4	123	534.7	405	9.6	4.6	12.1	11	2.15
Pinnacle West Capital	305.0	-12	1474.6	-7	-428.7	NM	-306.9	NM	NM	2.1	-21.2	NM	-3.91
Portland General	251.1	5	889.9	4	-9.1	NM	-7.8	NM	NM	13.6	-2.8	NM	-0.43
Potomac Electric Power	338.8	10	1552.1	10	27.5	42	210.2	23	8.1	6.3	11.5	13	1.87
Public Service Co. of Colorado	473.6	8	1794.9	4	58.0	47	149.7	2	12.3	9.0	13.3	11	2.48
Public Service Enterprise Group	1267.4	5	5093.2	6	96.7	-22	573.3	0	7.6	10.3	11.4	11	2.43
Puget Sound Power & Light	254.9	-5	956.8	2	29.6	-20	132.8	0	11.6	13.8	13.0	11	2.21
San Diego Gas & Electric	482.5	3	1789.0	1	47.6	-1	208.1	0	9.9	10.2	14.5	12	3.53
Scana	283.8	2	1147.8	0	24.9	15	142.6	-24	8.8	7.8	13.6	12	3.37
SCEcorp	1886.6	7	7502.5	4	125.4	-35	744.8	-10	6.6	11.0	12.4	13	3.21
Southern	1888.0	-2	8049.8	0	223.5	94	984.3	37	11.8	6.0	12.6	11	2.78
Teco Energy	286.4	5	1154.1	5	32.8	13	148.9	4	11.5	10.7	16.3	15	2.55
Texas Utilities	1151.6	0	4893.2	8	111.7	-12	-288.4	NM	9.7	11.0	-6.5	NM	-1.98
Union Electric	416.5	-1	2096.9	4	14.3	-11	321.5	9	3.4	3.8	14.3	11	3.01
UtiliCorp United	375.0	40	1075.4	20	26.2	25	73.5	25	7.0	7.8	12.6	13	2.23
Wheelabrator Technologies	334.8	12	1173.4	2	28.8	41	126.0	166	8.6	6.9	15.9	23	1.46
Wisconsin Energy	401.8	8	1538.9	7	49.7	4	195.2	1	12.4	12.9	13.1	13	2.81
(b) GAS, OIL & TRANSMISSION													
GROUP COMPOSITE	13423.3	-7	47385.3	0	156.3	-53	91.7	-91	1.2	2.3	0.2	NM	-0.03
Arkla	846.4	5	2777.5	15	13.6	-58	18.0	-82	1.6	4.0	0.5	NM	0.09
Atlanta Gas Light (3)	300.2	2	968.7	1	21.2	-11	46.7	-3	7.1	8.1	9.9	17	1.93
Brooklyn Union Gas (3)	311.1	5	1005.4	5	36.9	11	65.5	11	11.9	11.2	9.7	13	2.25
Columbia Gas System	790.3	22	2576.8	9	81.5	34	-794.8	NM	10.3	9.4	-95.4	NM	-15.72
Consolidated Natural Gas	757.2	-10	2607.0	-4	95.6	3	168.6	3	12.6	11.0	9.2	18	1.94
Eastern Enterprises	253.7	5	993.1	5	3.3	-77	29.4	-54	1.3	6.0	5.7	19	1.30
Enron	3593.0	-24	13519.5	3	64.6	21	241.8	20	1.8	1.1	12.8	16	2.15
Enserch	795.6	0	2834.7	1	3.9	-89	19.1	-77	0.5	4.3	0.7	NM	0.07
MCN	393.6	1	1276.3	6	5.4	-50	36.3	7	1.4	2.8	10.0	16	1.42

Footnotes on page 67

Been Printing Long

COMPANY	SALES				PROFITS				MARGINS		RETURN ON COMMON EQUITY 12 MONTHS ENDING 12-31	PRICE EARNINGS RATIO 2-21	12 MONTHS EARNINGS PER SHARE
	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	4TH QUARTER 1991 %	4TH QUARTER 1990 %			
National Fuel Gas (3)	272.3	4	874.9	1	27.0	28	54.8	12	9.9	8.1	10.1	14	1.79
nicor	467.5	1	1516.1	-1	37.6	-4	108.7	-4	8.0	8.4	15.4	11	3.71
Specific Enterprises	1781.0	0	6599.0	-5	-217.0	NM	-80.0	NM	NM	3.1	-6.2	NM	-1.45
anhandle Eastern	703.7	-19	2454.2	-18	30.3	NM	85.1	NM	4.3	NM	6.5	18	0.86
Peoples Energy (3)	346.0	4	1117.5	3	31.2	13	72.1	24	9.0	8.3	12.7	12	2.15
onant	399.6	-3	1421.0	5	13.2	-67	77.9	-15	3.3	9.7	6.7	16	1.82
ansco Energy	793.1	0	2738.8	-11	-139.5	NM	-167.4	NM	NM	NM	-36.1	NM	-6.58
illiams	619.1	14	2104.7	16	47.5	-9	110.0	43	7.7	9.6	9.5	16	2.35

PHABETICAL LIST OF COMPANIES

Number following each company name identifies the Scoreboard category under which it is listed

Alco Health Services 12a	America West 23a	Amgen 12b	Arvin Industries 2b	Baltimore G&E 24a	Becton, Dickinson 12d	Boeing 1
Alco Standard 5	American Brands 6e	Amoco 11b	Asarco 16c	Banc One 3b	Bell & Howell 18a	Boise Cascade 19a
Alcoa 16a	American Cyanamid 4	Amoskeag 15d	Ashland Oil 11b	Bancorp Hawaii 3d	Bell Atlantic 22b	Borden 10b
Alexander & Alexander 17a	American Electric 24a	AMP 9d	AST Research 18b	Bandag 2c	BellSouth 22b	Boston Edison 24a
Alexander & Baldwin 23d	American Express 17a	AMR 23a	AT&T 22a	Bank of Boston 3a	Bemis 7b	Bowater 19b
Allegheny 17a	American Greetings 14d	Anacomp 18a	Atkinson (G. F.) 21a	Bank of New York 3a	Beneficial 17a	Briggs & Stratton 15c
Allegheny Ludlum 16b	American Home 12b	Anheuser-Busch 6c	Atlanta Gas Light 24b	BankAmerica 3d	Bergen Brunswig 12a	Bristol-Myers Squibb 12b
Allegheny Power 24a	American Intl. Group 17b	Aon 17b	Atlantic Richfield 11b	Bankers Trust New York 3a	Best Buy 6b	Broad 17a
Allergan 12b	American Medical 12c	Apogee Enterprises 21a	Automatic Data 18c	Banta 21d	Bethlehem Steel 16b	Brooklyn Union Gas 24b
Alliant Techsystems 15a	American National 17b	Apple Computer 18b	AutoZone 8	Bard (C. R.) 12d	Betz Laboratories 4	Brown Group 6a
Allied-Signal 5	American President 23d	Applied Materials 15c	Avery Dennison 15a	Barnett Banks 3c	Beverly Enterprises 12c	Brown-Forman 6c
Alltel 22b	American Stores 10c	Archer Daniels 10b	Avnet 21b	Baroid 11c	Block & Decker 15b	Browning-Ferris 21c
AM International 18b	American TV 20a	Arco Chemical 4	Avon Products 6d	Bausch & Lomb 12d	Block (H&R) 17a	Bruno's 10c
Ames 16a	Ameritech 22b	Arkla 24b	B	Baxter International 12d	Blockbuster Ent. 14b	Brunswick 14d
Amdahl 18b	Ameritrust 3b	Armco 16b	Baker-Hughes 11c	Bear Stearns 17a	Blount 15a	Burlington Coat Factory 8
American Building 21e	Ames Dept. Stores 8	Armstrong World 6b	Ball 7a	Bearings 21b	Boatmen's Bancshares 3b	Burlington Holdings 15d
Amerada Hess 11b	Ametek 9c	Arrow Electronics 21b		Beckman Instruments 9c	Bob Evans Farms 14a	

Continued on p. 90

r Than Any Other

CORPORATE SCOREBOARD

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

Continued from p. 89		Chesapeake 19b	ConAgra 10b	Danaher 15b	Drug Emporium 12a	Exxon 11b	Florida Progress 24a	General Re 17b
Burlington Northern 23b	Chevron 11b	Conner Peripherals 18b	Consec 17b	Dart Group 5	Du Pont 4	F	Flowers Industries 10b	General Signal 15c
Burlington Resources 11b	Chrysler 2a	Consolidated Edison 24a	Cons. Freightways 23d	Data General 18b	Duke Power 24a	Family Dollar Stores 8	Floor 21a	Genuine Parts 21b
C	Chubb 17b	Cons. Natural Gas 24b	Consolidated Papers 19b	Dayton Hudson 8	Dun & Bradstreet 20b	Fay's 12a	FMC 15c	Georgia Gulf 4
Cabot 4	Cincinnati Bell 22b	Consolidated Rail 23b	Consolidated Stores 8	Dean Foods 10b	Duracell International 15a	Federal Home Loan 17a	Food Lion 10c	Georgia-Pacific 19a
Caesars World 14c	Cincinnati G&E 24a	Constar International 7a	Continental Airlines 23a	Deere 15c	Durr-Fillauer Medical 12a	Federal Express 23c	Foodrama 10c	Gerber Products 10b
Caldor 8	Circle K 10c	Continental Bank 3b	Continental Medical 12c	Dell Computer 18b	DWG 15d	Federal Natl. Mtg. 17a	Foodmaker 14a	Getty Petroleum 21b
CalFed 17c	Circuit City Stores 6b	Control Data 18b	Cooper Industries 9a	Delta Air Lines 23a	I	Federal Paper Board 7b	Ford Motor 2a	Giant Food 10c
Campbell Soup 10b	Circuit City Stores 6b	Cooper Tire & Rubber 2c	Cooper Tire & Rubber 2c	Delta Woodside 15d	E	Federal Mogul 2b	Fort Howard 19b	Gibson Greetings 14d
Capital Cities/ABC 20a	Circuit City Stores 6b	Coors (Adolph) 6c	Coming 15a	Deluxe 18a	Eagle Food Centers 10c	Federated Dept. Stores 8	Foster Wheeler 21a	Gillette 6d
Capital Holding 17b	Circuit City Stores 6b	Costco Wholesale 8	CPC International 10b	Detroit Edison 24a	Eagle-Picher Industries 2b	Ferro 4	Foundation Health 12c	Glatfelter (P. H.) 19b
Cardinal Distribution 12a	Circuit City Stores 6b	Cray Research 18b	Crane 15a	Dexter 4	Eastern Enterprises 24b	FHP International 12c	FoxMeyer 12a	Glenfed 17c
Carnival Cruise Lines 14d	Circuit City Stores 6b	Crestar Financial 3c	Crown Cork & Seal 7a	Dial 5	Eastman Kodak 14d	Fieldcrest Cannon 15d	FPL Group 24a	GM Hughes Electronics 5
Carolina Freight 23d	Circuit City Stores 6b	Cummins Engine 2b	CSX 23b	Diamond Shamrock 11b	Eaton 2b	Figgie International 5	Freeport-McMoRan 4	Golden West 17c
Carolina Power 24a	Circuit City Stores 6b	Cyprus Minerals 16c	Curice-Burns Food 10b	Dibrell Brothers 6e	Echlin 2b	Finco 11b	Fuller (H. B.) 4	Good Guys 6b
Carter Hawley Hale 8	Circuit City Stores 6b	Dairy Mart 10c	Dana 2b	Diebold 18a	Eckerd (Jack) 12a	Fingerhut 8	Fuqua Industries 5	Goodrich (B. F.) 4
Carter-Wallace 12b	Circuit City Stores 6b	Dresser Industries 11c		Digital Equipment 18b	Edison Brothers 8	First Bank System 3b	G	Goodyear Tire & Rubber 5
Casey's General 10c	Circuit City Stores 6b			Dillard 8	Edwards (A. G.) 17a	First Brands 15a	Gannett 20b	Grace (W. R.) 4
Caterpillar 15c	Circuit City Stores 6b			Disney (Walt) 14b	EG&G 21a	First Chicago 3b	Gap 8	Granger (W. W.) 21b
CBI Industries 11c	Circuit City Stores 6b			Dole Food 10b	Egghead 18a	First City Bancorp. 3d	GATX 23d	Granite Construction 21c
CBS 20a	Circuit City Stores 6b			Dollar General 8	Electronic Data 18c	First Fidelity 3a	Gaylord Container 7b	Great American Mgmt. 15
CDI 21e	Circuit City Stores 6b			Dominion Resources 24a	Emerson Electric 9a	First Financial Mgmt. 17a	Gaylord Ent. 20a	Great A&P 10c
Centel 22b	Circuit City Stores 6b			Donnelley (R. R.) 21d	Engelhard 4	First Interstate Bancorp. 3d	Geico 17b	Great Lakes Chemical 4
Centenior Energy 24a	Circuit City Stores 6b			Dover 15c	Energy 24a	First of America Bank 3b	GenCorp 1	Great Western 17c
Centex 13b	Circuit City Stores 6b			Dow Chemical 4	Enron 24b	Fisher-Price 14d	General Cinema 5	Grey Advertising 21d
Central & South West 24a	Circuit City Stores 6b			Dow Jones 20b	Equifax 17a	Fleet/Norstar 3a	General Dynamics 1	Grossman's 8
Champion International 19b	Circuit City Stores 6b			DPL 24a	Ethyl 4	Fleetwood Ents. 14d	General Electric 5	Grumman 1
Charming Shoppes 8	Circuit City Stores 6b			DQE 24a	Exide 15a	Fleming 10a	General Mills 10b	GTE 22b
Charter Medical 12c	Circuit City Stores 6b						General Motors 2a	Gulf States Utilities 24a
Chase Manhattan 3a	Circuit City Stores 6b						General Public Uts. 24a	
Chemical Banking 3a	Circuit City Stores 6b							
Chemical Waste 21c	Circuit City Stores 6b							

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11c 21e 4 10c 14d 14d 15c 9b 15a 17b 6a 14d 24a 12c 8 10b 6d 4 10b 18b 15a 12c 8 14c 8 8 18a 9c 17b 10b 5 24a 9a 10b 14d 12c	23d 3b 18b 10b 24a 15a 12d 9c 10b 21e 15c 10c 16b 9d 18a 6b 15d 18c 15c 21d 10b 6b 6d 10b 19b 5 J 21a 19b 8 17b 12d 9c	15a 15c 21e K 8 16a 21b 23b 24a 13b 10b 6a 21e 17b 11b 3a 6b 19b 14b 20b 10c L 6b 13a 15a 8 6b 6a 12b 8 17b 9b 6a 1 4 17a	24a 12a 7b 9b 18c 11b 19a 8 9d 5 4 4 M 8 16c 9a 12c 3b 11b 12b 15a 14c 17a 10c 1 6b 2b 14d 18b 11b 16a 8 6b 22a 10b 21a	14a 1 20b 22a 12a 24b 19b 12a 20b 12d 3a 8 12b 20b 3a 18a 17a 8 8 3b 18a 18c 3a 24a 18a 9c 15a 3a 11b 9d 4 3a 17a 21a 4	9b 20a 11b H 11a 4 10a 3b 10c 24b 5 12c 9d 9a 3c 2a 3b 6d 8 11a 24a 24a 16c 16c 24a 24b 24b 6a 8 4 24a 24a 8 24a 24a 8 15a 8	18c 16b 17b 22b O 11b 21b 5 24a 24a 4 21e 21d 18c 17b 11b 2a 14d 12d 13a 7a 6a 2a 24b 24a 22a 22b 12c 24a 17a 8 24b 24b 15a 8	5 10c 8 24a 15c 24b 8 6c 13b 9c 12a 10b 8 12b 16c 23c 24a 6e 11b 6a 13b 6b 10b 21e 24a 18a 11a 3a 14d 24a 19b 24a 13a 16c 5 21b 8 Continued on p. 92
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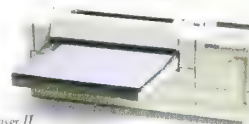
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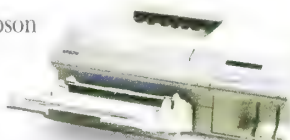
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Continued from p. 91		Roadway Services 23d	Scripps (E.W.) 20b	Standard Products 2b	Tenneco 5	Tyson Foods 10b	USLife 17b	Weirton Steel 16b
Primerica 17a	Rochester Telephone 22b	Seagate Technology 18b	Seagate Technology 18b	Standard Register 18a	Terex 2b	U	UST 6e	Weiss Markets 10c
Procter & Gamble 6d	Rockwell International 5	Sears, Roebuck 8	Sears, Roebuck 8	Stanhome 6d	Tesoro Petroleum 11b	U. S. Bancorp 3d	USX-Marathon 11b	Wellman 4
Progressive 17b	Rohm & Haas 4	Security Pacific 3d	Security Pacific 3d	Stanley Works 15b	Texaco 11b	U. S. Healthcare 12c	USX-U. S. Steel 16b	Wells Fargo 3d
Promus 14c	Rohr 1	Service Corp. Intl. 21e	Service Corp. Intl. 21e	Staples 21b	Texas Industries 13a	U. S. Shoe 8	UnitiCorp United 24a	Wendy's Intl. 14a
Protective Life 17b	Rose's Stores 8	Service Merchandise 8	Service Merchandise 8	State Street Boston 3a	Texas Instruments 9d	U. S. Surgical 12d		Western Digital 18c
Provident Life 17b	Ross Stores 8	Shaw Industries 15d	Shaw Industries 15d	Stewart & Stevenson 15c	Texas Utilities 24a	UAL 23a	V	Western Publishing 20t
PS Co. of Colorado 24a	Rouse 13b	Shawmut National 3a	Shawmut National 3a	Stone Container 7b	Textron 5	UJB Financial 3a	Valero Energy 11b	Westinghouse Electric 9
Public Service Ent. 24a	Rubbermaid 15a	Sherwin-Williams 13a	Sherwin-Williams 13a	Stop & Shop 10c	Thermo Electron 9c	Unifi 15d	Valhi 5	Westmark Intl. 12d
Puget Sound Power 24a	Ruddick 10c	Shoney's 14a	Shoney's 14a	Storage Technology 18b	Thiokol 1	Union Bank 3d	Valley National 3d	Westmoreland Coal 11c
Q	Russell 6a	ShopKo Stores 8	ShopKo Stores 8	Strawbridge & Clothier 8	3M 15a	Union Camp 19b	Valspar 13a	Westvaco 19b
Quaker Oats 10b	Ryder System 23c	Sigma-Aldrich 12b	Sigma-Aldrich 12b	Student Loan Mktg 17a	Thorn Apple Valley 10b	Union Carbide 4	Value City 8	Wetterau 10a
Quaker State 11b	Rykoff-Sexton 10a	Signet Banking 3c	Signet Banking 3c	Sun 11b	Time Warner 20b	Union Electric 24a	Variation Associates 9b	Weyerhaeuser 19a
Quanex 16b	Ryland Group 13b	Silicon Graphics 18b	Silicon Graphics 18b	Sun Microsystems 18b	Times Mirror 20b	Union Pacific 23b	Variety 15c	Wheelabrator Techs. 24
Quantum Chemical 4	5	Smart & Final 10a	Smart & Final 10a	Sundstrand 1	Timken 15c	Union Texas 11b	Venture Stores 8	Wheeling-Pittsburgh 16l
Quantum 18b	Safeco 17b	Smith (A. O.) 2b	Smith (A. O.) 2b	Super Food Services 10a	TJX 8	Unisys 18b	VF 6a	Whirlpool 6b
QVC Network 8	Safeguard Scientifics 18c	Smith's Food & Drug 10c	Smith's Food & Drug 10c	Super Rite 10a	Torchmark 17b	United HealthCare 12c	Viacom 20a	Whitman 5
R	Safety-Kleen 21e	Smithfield Foods 10b	Smithfield Foods 10b	Super Valu Stores 10a	Tosco 11b	United Stationers 21b	Village Super Market 10c	Wickes 15d
Ralston Purina 10b	Safetyway 10c	Snap-on Tools 15b	Snap-on Tools 15b	Supermarkets Gen 10c	Toys 'R' Us 8	United Technologies 1	Vons 10c	Willamette Industries 19
Raychem 9a	Salomon 17a	Society 3b	Society 3b	Syntex 12b	Transamerica 17a	Unitrin 17b	Vulcan Materials 13a	Williams 24b
Raytheon 9b	San Diego G&E 24a	Sonaco Products 7b	Sonaco Products 7b	Sysco 10a	Transco Energy 24b	Univar 21b		Winn-Dixie Stores 10c
Readers Digest 20b	Santa Fe Pacific 23b	Southern 24a	Southern 24a		Travelers 17b	Universal 6e	W	Wisconsin Energy 24a
Reebok International 6a	Sara Lee 10b	So. New Eng. Tel. 22b	So. New Eng. Tel. 22b	Tambrands 6d	Trinova 15a	Universal Foods 10b	Waban 8	Witco 4
Republic New York 3a	Savannah Foods 10b	Southwest Airlines 23a	Southwest Airlines 23a	Tandem Computers 18b	TRW 5	Universal Health 12c	Wachovia 3c	Woolworth 8
Reynolds & Reynolds 18a	Scanco 24a	Southwestern Bell 22b	Southwestern Bell 22b	Tandy 18b	Turner 13b	Unocal 11b	Wackenhut 21e	Worthington Inds 16b
Reynolds Metals 16a	SCC Corp 24a	Spiegel 8	Spiegel 8	Tech Data 18a	Turner Broadcasting 20a	Unocal Exploration 11b	Wal-Mart Stores 8	Wrigley (Wm.) Jr. 10b
Rhone-Poulenc Rorer 12b	Schering-Plough 12b	Springs Industries 15d	Springs Industries 15d	Teco Energy 24a	TW Holdings 14a	UNUM 17b	Walgreen 12a	XYZ
Richfood Holdings 10a	Schlumberger 11c	Sprint 22a	Sprint 22a	Tecumseh Products 13a	Teledyne 5	Upjohn 12b	Wang Laboratories 18b	Xerox 18b
Riser Foods 10c	Schulman (A.) 4	SPX 15b	SPX 15b	Tektronix 9c	Temple-Inland 7b	US Air Group 23a	Warnaco Group 6a	Yellow Freight 23d
Rite Aid 12a	Schwab (Charles) 17a	Standard Commercial 6e	Standard Commercial 6e			USF&G 17b	Warner-Lambert 12b	York International 13a
RJR Nabisco 6e	SCI Systems 9b	Standard Federal 17c	Standard Federal 17c			USG 13a	Washington National 17b	Zenith Electronics 6b
	Scott Paper 19b						Washington Post 20b	
							Waste Management 21c	

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International Space Year
1992

KIMBERLY-CLARK'S EUROPEAN PAPER CHASE

Looking for growth, CEO Sanders is storming the Continent



SANDERS' INNOVATIVE TRAINING PANTS FOR TODDLERS PUSHED HIM INTO THE TOP JOB

Wayne R. Sanders always knew his engineering background would come in handy, but he never figured it would help him design a better diaper. Taking over Kimberly-Clark Corp.'s infant care unit in 1987, he found group members at wit's end. They had spent \$12 million trying to make disposable pants for potty-training toddlers, but the team couldn't figure out how to make the pants stretchy enough that kids could pull them off by themselves. Sanders swung into action. Using a new synthetic fabric that the company was experimenting with elsewhere, he quickly worked up a prototype. The result was Huggies Pull-Ups, one of the company's most successful product introductions.

That sort of innovation has taken Kimberly-Clark a long way in recent years. Under Darwin E. Smith, chief executive officer from 1972 until last December, the stodgy newsprint and cigarette-paper maker blossomed into a consumer-products powerhouse. Last year, it earned \$508.3 million on record sales of \$6.8 billion, 82% of which came from consumer

goods such as Kleenex tissues and Kotex feminine products. Since 1988, the Dallas-based company has generated a stellar 20% average annual return on equity.

Now, the task of maintaining that brisk pace belongs to Sanders, whose success with Pull-Ups helped propel him into the CEO's office. It's going to be rough. Already, the days of heady U.S. growth are history. Domestic markets for some of Kimberly's products, such as disposable diapers, are maturing, while price wars in such major segments as bathroom tissue are cutting into prof-

its. Operating earnings last year fell by 1.6%. "Wayne is going to have a tougher job than I did," says Smith, who will pass the chairman's title to Sanders in April. "It's a lot easier to add 10% to a billion dollars than to add 10% to \$7 billion, and that's what he has to do."

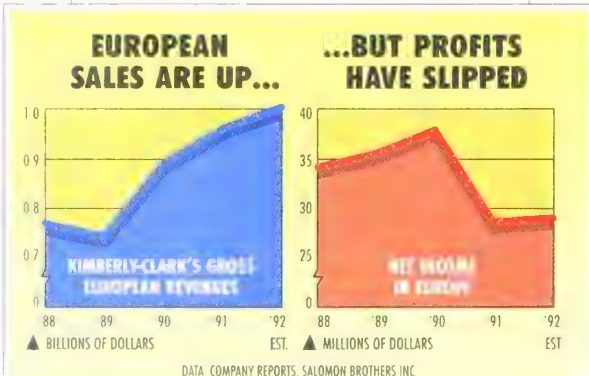
Sanders, 44, has little doubt about where growth lies: Europe. Although Kimberly has been selling its facial tissue, paper towels, and feminine products in Europe for decades, it is a decidedly North American company. In 1991, 80% of sales and 74% of net income came from the U.S. and Canada. European sales equaled only one-fifth, or \$959 million, of North American revenue. While Kimberly also has a presence in the more robust Far East, Sanders sees the post-1992 Common Market as a simpler means for growth. But, he concedes, "we're playing catch-up in Europe. We've got a big building job to do."

HODGEPODGE. Does he ever. Lacking much of a European infrastructure, Kimberly is spending heavily to beef up its sales force, distribution network, and information systems there. A new tissue plant went on line in France last fall. The company has also built or expanded two mills in North Wales in recent years and will start another in Britain this spring.

Its total investment in European plants has almost doubled since 1988, to \$980 million. That's a sizable chunk of Kimberly's \$2.3 billion-plus in capital expenditures over the past three years. But the lavish spending, combined with intense competition and a sluggish European economy, is taking a toll on profits. Kimberly's net income from European operations fell 25% last year, to \$28.6 million, and should be flat in 1992.

Even with a growing presence in Europe, Kimberly faces a monumental marketing challenge. When trade barriers come down at the end of this year, the Continent won't be the unified country that many would like it to be. Instead, marketers will still have to deal with a hodgepodge of cultures with disparate tastes—not to mention various languages and, at least for now, currencies.

Worse, Kimberly's major rivals are already well entrenched in Europe. Procter & Gamble Co. is a major force in diapers. James River Corp. and Scott Paper Co. are dominant players in Europe's bathroom-tissue market, particularly in France, where both have operated plants for several years. "I'm appalled at the arrogance of Kimberly-Clark, thinking they can come in and put a plant up in the



Nightmare Scenario #2

THE RUNAWAY CASH SUCKER.

"Why didn't someone tell me this @\$!?!& network would cost so much?"

A lot of executives go pale when they see how much their computer networks are really costing them.

"What's with all this new pay-roll?" they ask. "I thought this thing was going to save us money."

Too late. They're strapped to a runaway cash sucker and heading downhill fast.

The fact is, the real economics of running a computer network are never even mentioned by the people trying to sell you one.

And not knowing can cost you plenty.

Research proves Banyan more cost-effective than Novell, IBM, DEC and Microsoft.

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It was compiled by the Business Research Group, and shows how

Banyan,[®] Novell,[®] IBM,[®] DEC,[®] and Microsoft[®] stack up against each other in cost of operation.

What BRG did was to interview the day-to-day LAN managers at 180 different organizations about the length of time required to execute 11 typical network functions.



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Banyan won in all 11 categories. Often by astounding margins.

Whatever the job, administrators of Banyan VINES[®] networks were able to do them faster.

And faster translates into smaller staffs and lower cash outlays.

Banyan won across the board because our unique integrated architecture greatly simplifies administration. With Banyan VINES, cost-efficiency is built in from the beginning.

Computer networks are rapidly becoming indispensable to business. So understanding the true cost of networking is now critical.

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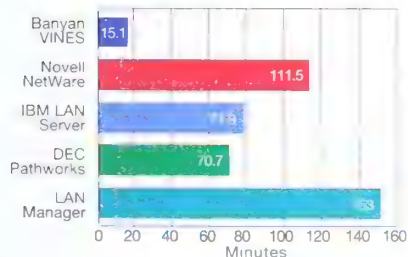
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Time Required To Add A Network-Wide Service



Business Research Group/Newton, MA bc16D

For sheer cost-effectiveness, Banyan surpasses everyone.

face of all the competition," snipes one international competitor. "They'll have to buy their way in" with price-cutting.

Not so, argues Sanders. In Germany, the company has relied on continuous product improvements and a heavy dose of advertising. Its boxed facial tissues, baby wipes, and paper towels dominate the market. After less than two years in the French toilet-paper business, Kimberly has muscled into the No. 2 position behind an entrenched local brand by vigorously promoting its products as softer and stronger.

'MOVING TARGET.' Noticeably absent from Kimberly's European assault are diapers. While the company has steered clear of that intense competition so far, entering the fray is all but inevitable given Kimberly's success at home. With 33% of the \$4.2 billion U.S. market, Huggies leads both of the P&G brands, Pampers and Luvs. Sanders isn't telling, but analysts think Kimberly is likely to roll out its Pull-Ups training pants first, to make a name for the Huggies brand. "It's a logical step because they won't be ruffling anyone's feathers," says Salomon Brothers Inc. analyst Sherman Chao. "There's no other competition."

Surprisingly, there's none in the U.S., either. Pull-Ups is now a \$300 million business for Kimberly. Even giant rival P&G has been left in the dust. By the time P&G or another competitor comes up with an answer to Pull-Ups, Sanders boasts, Kimberly will be way out in front. "The next two generations are already laid out," he says. "Pull-ups will be a moving target."

The low-key Sanders is allowed to gloat a little. The lanky former Illinois Institute of Technology basketball player, who started with the company as a financial analyst in 1975 and quickly bounded up the ladder, took a big risk with Pull-Ups. Using his new design meant scrapping the original attempts and taking a \$12 million charge against earnings. After lab tests on his model, Sanders gambled again by immediately going to full production with four new machines in the company's Paris (Tex.) plant. In an equally unusual move, he dragged the product directly into stores without market tests. "The business strategy and product were well thought out," explains Smith. "In our business judgment, it was a good product."

Now, Sanders has moved on to much bigger risks. If he stays as long as his predecessor, he'll have plenty of chances to match Smith's track record. Just how long he stays, though, will depend a great deal on his adventures in Europe.

By Stephanie Anderson Forest in Dallas, with Mark Maremont in London and bureau reports

AIRLINES

SOMEONE UP THERE LOVES AMERICA WEST

Despite all odds, the bankrupt carrier is still airborne



LONGER FLIGHTS AND A COLUMBUS (OHIO) HUB COULD REJUVENATE THE PHOENIX-BASED LINE

Most U.S. airlines greeted the end of 1991 with a measure of optimism. How, they wondered, could 1992 be any worse? But America West Airlines Inc. was another story. As the new year dawned, competitors, analysts, and travel agents began a death watch on the bankrupt carrier. Chief Executive and airline co-founder Michael J. Conway had taken draconian measures, laying off 15% of his employees, cutting pay by 10% for the remaining 12,000, and grounding 15 planes. But most observers were predicting the Phoenix-based carrier would be gone by the time the cactus bloomed.

Well, the cactus have been in flower since February, and America West is still flying. Conway, the rough-talking son of a Brooklyn cab driver, is now thumbing his nose at the doomsayers. He's kicking off an ambitious plan to build a hub in Columbus, Ohio, and is restructuring routes to move away from competition with formidable Southwest Airlines Co. "This airline is too tough to die," boasts Conway. Few would support that claim, but many observers are suddenly more upbeat. America West, says Standard & Poor's Corp.'s Philip Baggeley, has "leveled off at the treetops."

EASTERN EXPOSURE. Passengers have finally used up the half-priced tickets sold in desperation in 1991, which had put a strain on cash flow. In January, the carrier reported achieving the lowest costs in the industry. And bookings are up, Conway says. Two months ago, advance bookings were 30% below 1990 levels. Conway has since bombarded travel agents with letters—even dinners—and many have come back. February's advance bookings were on a par with

1990's, before the war battered traffic.

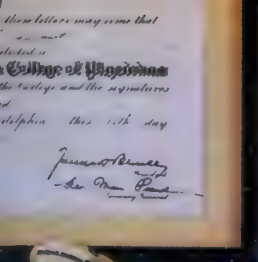
Conway has overhauled the airline's strategy. Until recently, it flew mostly short haul, operating mainly from its hubs in Phoenix and Las Vegas. But it suffered in the competition with Southwest, which has rock-bottom prices. So Conway is moving toward longer flights flying to more Eastern cities and reducing service at Western hubs.

At the center of the strategy is the airline's launch of a new hub in Columbus. As of Mar. 1, America West is operating 26 flights daily. Rapid expansion has gotten the airline in trouble before. But Conway is gambling that Columbus, which boasts such corporate headquarters as The Limited, and Banc One, will bring in high-paying business travelers. Conway claims America West can reduce average fares for that market by 30% and still bring in 30% more than it's getting at its Las Vegas hub.

The CEO also believes a Columbus hub will help raise badly needed cash. The airline had just \$38 million of unrestricted cash as of Jan. 31 and will get \$13 million when the sale of its Nagoya route to Northwest Airlines Inc. is cleared. But Conway is trying to raise \$100 million more, partly by tapping local businesses.

Conway hopes to line up commitments by April, two months before the airline is due to submit a reorganization plan to the bankruptcy court. Still, staying alive ultimately depends on an economic rebound. "If they can make it to that elusive recovery," they have a great shot at survival, says analyst Helene Becker of Lehman Brothers Inc. That's still a big "if," but not as big as before.

By Eric Schine in Phoenix



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The Travelers' commitment to quality products and cost control starts with 35,000 employees dedicated to customer satisfaction.

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DETROIT SOUTH

MEXICO'S AUTO BOOM: WHO WINS, WHO LOSES

Way uphill from the Mexican city of Toluca, in the shadow of a snow-covered volcano, Darío Sánchez has built a small cinder-block house for his family. The house has no plumbing, no furniture, no heat for the cold mountain nights. This sparse country life is what he's used to. But unlike his parents and grandparents, who lived off the land, the 26-year-old Sánchez has a factory job. Every day, he catches a bus for the one-hour commute to Toluca, where he works as a welder in Chrysler Corp.'s assembly plant. Many of the Dodge Spirits and Shadows he welds together head straight north, to the U.S. market.

For Sánchez, the factory job means hard work for a badly needed \$78 a week. But by moving from the cornfields to the car factories, he and thousands of other Mexican workers are actually stepping into a drama of continental proportions. They are emerging as a low-cost, high-quality work force that will help reshape the North American auto industry.

Call it Detroit South. With each year, Mexican laborers are producing more and more of America's cars. In February, General Motors Corp. stunned Americans with factory closings across the U.S. and Canada that would shift some jobs to Mexico. Engine production, for example, will leave Moraine, Ohio, with the loss of 549 jobs, for GM's plant in Toluca. And while the company's Willow Run (Mich.) plant got the ax, the

facility in Arlington, Tex.—near low-cost suppliers in Mexico—survived.

There's no mistaking it. A new big-league car producer is quietly rising south of the border. Mexican workers—earning just \$10 to \$20 a day—are building hundreds of thousands of Ford Escorts, Buick Centuries, and Dodge Ramchargers and sending them north. Even if negotiations for a North American

Free Trade Agreement (NAFTA) bog down, Big Three executives expect the Mexican industry to double by the year 2000, to 2 million vehicles. And with an agreement, says Ford Motor de México President Víctor Barreiro, "we could be making 3 million units a year here, or more." Last year, Mexico topped 1 million vehicles, and exports surged 36%, to 358,000.

'INTEGRAL.' By the end of the decade, one in six cars and light trucks made in North America could come from the new Detroit

South. From a sprawling network of factories, many of them new, the Big Three will specialize in small cars, suited for Mexico's market. But nearly half of them will be exported back to the U.S., up from a third today. Since Mexico's labor is so cheap, U.S. companies will continue to cut capital costs by using fewer robots and less pricey machinery. The advantages may even persuade Detroit to shift production of small cars like the Pontiac LeMans, now built by Korea's Daewoo, back to this hemisphere. Parts suppliers also will shift south. "We're looking at Mexico as an



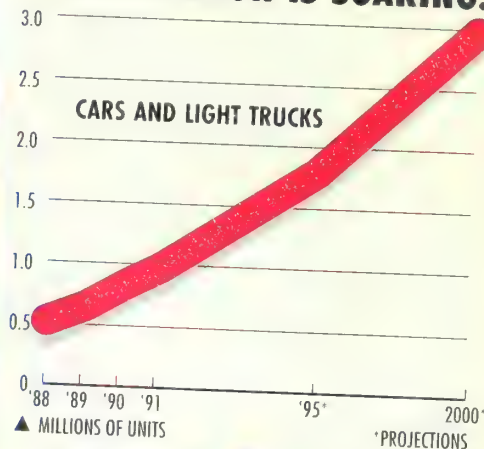
SUCCESS: FORD'S HERMOSILLO PLANT IS KNOWN FOR QUALITY



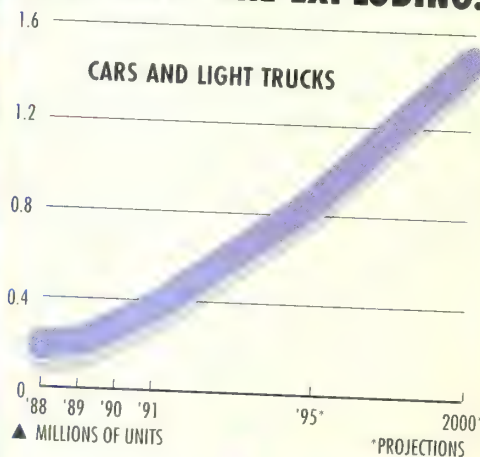


MEXICO'S CAR FEVER

PRODUCTION IS SOARING...



...EXPORTS ARE EXPLODING...



...AND SO ARE SALES

PERCENT CHANGE IN GROWTH IN LIGHT-VEHICLE SALES FROM 1985 TO 2000

U.S.	0.7%
CANADA	-1.0%
MEXICO	435.7%

DATA: MEXICAN AUTOMOBILE INDUSTRY ASSN.
MEXICAN NATIONAL AUTOPARTS INDUSTRY ASSN. BW

integral part of our North American plans," says Robert L. Gualdoni, director of planning for parts maker Allied-Signal Inc.

At the same time, Detroit will supply Mexico's market with other models from plants in the north. Soon, companies

With results like that, Detroit's beleaguered auto makers are quietly jubilant. Afraid to set off a firestorm of protest, however, the auto makers are loath to discuss their Mexican strategies. Admits one Big Three executive in Mexico City: "We'd put up a lot more plants

work force amenable to the manufacturing revolution. This Japanese-style system, which has caught on in Mexico, calls for a flexible labor force, where highly trained workers in small teams can jump into each other's jobs and monitor quality each step of the way. Some workers have taken to quality programs with a near-religious zeal. Singing groups at Ramos Arizpe have even recorded odes to quality manufacturing. In *Planta Mia*, workers sing, "Ay, dear assembly plant, with your people so united and responsible. . ."

Although workers at GM's Saturn and Ford's Wayne (Mich.) Escort factory have adopted this nimble approach, many U.S. plants are still hobbled by rigid work rules. Now, Mexico's success gives carmakers leverage to push changes back home. The message couldn't be clearer. "When they start sending big-ticket items down there, it puts the fear in you," says Michael Schultz, a 36-year-old welder at Chrysler's Sterling Heights (Mich.) plant.

Mexico is hardly the Big Three's secret. Nissan, the lone Japanese carmaker in Mexico, supplies Sentras and minivans to the Mexican market from its aging plant in Cuernavaca. But it is spending \$1 billion on expansions and a new assembly plant in Aguascalientes to make Sentras for export. And it is bringing suppliers in tow. The Europeans also view Mexico as a vital export platform. Volkswagen is battling the Honda Accord with its Mexican-made Jettas. Even Mercedes, which is losing ground in the U.S. to Japan's top-drawer Infiniti and Lexus models, is gearing up to make luxury cars in Mexico within a year. "If we weren't convinced we could train people to Mercedes level, we wouldn't start the operation," says Andreas Sperl, CEO of Mercedes-Benz México.



DARIO SANCHEZ DELGADO

26, married,
two children

WORK Welder at
Chrysler plant in
Toluca, Mexico

SENIORITY 5 years

PAY \$1.75 an hour

BENEFITS Mandated
profit-sharing, extra
vacation pay, one
month's bonus at
Christmas, a
one-cent lunch

EDUCATION Jr. high

could be shipping cars and parts across the Rio Grande as if it were just another state line. With a savings of up to \$1,000 a car, the new partnership between First and Third World neighbors could get the U.S. auto industry back into the race with Japan.

Detroit is betting it can meet Japanese prices—and quality—with its new work force south of the border. The stakes could hardly be higher. For Mexico, it's a bold bid to parlay two of its biggest assets, a low-cost work force and a 2,000-mile border with the U.S., into winning a place among industrialized nations. For Detroit and the U.S., the payoff could be a stronger North America Inc. Many believe that a prosperous Mexico will soak up U.S. goods, spur higher-value jobs up north, and make the continent more competitive. But anxious American workers are losing jobs today with only the promise that management's gambit in Mexico will bring better jobs tomorrow (page 103).

QUIET SHIFT. How did Mexico become "a must" in autos? A startling discovery clinched its status. Mexican auto workers, it seems, not only are dirt cheap but can also deliver quality. In Detroit's view, Mexico's young work force adapts more quickly to new industrial regimes than entrenched workers in the Rust Belt. The workers in GM's Ramos Arizpe plant, for example, quickly mastered Japanese-style manufacturing techniques to become GM's No. 1 plant, setting companywide quality records.

in Mexico if it weren't for the UAW."

The Big Three are tiptoeing because they know the reshuffling of America's already limping auto sector is inflicting enormous pain. And workers aren't letting the jobs go south without a fight. The UAW is pushing hard to spike the free-trade agreement. If they don't, "you can kiss the jobs and livelihoods of thousands of Americans goodbye," says UAW President Owen F. Bieber. If the FTA is passed, the UAW wants a clause written into it protecting U.S. jobs.

U.S. auto workers aren't just battling Mexico's low wages. They see themselves pitted against a young, malleable

MICHAEL SCHULTZ

36, married, one child

WORK Welder at
Chrysler's Sterling
Heights (Mich.) plant

SENIORITY 17 years

PAY \$16 an hour

BENEFITS Paid vacation,
full health care,
income protection
for layoffs

EDUCATION High school,
working on associate
degree



ALL REVVED-UP SOUTH OF THE BORDER



Detroit would like to keep Mexico for itself, and that's one of the most contentious issues being discussed in three-way North American trade talks. To discourage foreigners from using Mexico as an export base, Detroit's lobbyists are pushing hard to establish high North American-content requirements. Such measures would force Japanese exporters in Mexico to source locally or, better yet, ship out. But the Mexicans don't want to drive away Toyota Motor Corp. and Honda Motor Co., which are waiting to see how a NAFTA turns out.

WIN-WIN. While defending its southern flank from the Japanese, Detroit is cashing in on Mexico's ravenous home market. Unit sales in Mexico rocketed last

year by 17%, as consumers emerged from eight years of debt doldrums. Mexico's car market is expected to grow far faster in the 1990s than northern markets (chart, page 99), and that growth, say Big Three executives, should defuse criticism of their southern strategy. Mexico's production for its home market, they expect, will gobble up billions of dollars' worth of U.S. parts, which should eventually translate into more, not fewer, Rust Belt jobs. "We're Mexico's natural supplier," says Peter G. Morici, professor at the University of Maine. As Mexican workers get better salaries, they will also snap up U.S.-made consumer goods. "It's win-win."

Detroit's courtship with Mexico start-

ed in earnest in the late 1960s, when the auto makers opened up low-wage assembly plants, known as *maquiladoras*, on the south side of the U.S.-Mexican border. For \$4 or \$5 a day, Mexican workers threaded wires into cables and stitched upholstery. The materials were shipped down in pieces and came back assembled. When the Japanese challenge heated up in the 1980s, Detroit moved more work to the *maquiladoras*. Today, some 100,000 Mexicans work for U.S. auto companies in scores of border plants, many of them now increasingly sophisticated operations.

By the mid-1980s, Detroit needed more than *maquiladoras*. The Japanese were setting up their own plants in America's

rural Midwest, where they found young, nonunion workers. Detroit would answer this challenge with transplants of its own—in Mexico.

Ford started the trend. Working with their partners at Mazda Motor Corp., Ford executives settled on the desert cattle town of Hermosillo, a five-hour drive from Tucson. There, they found what they were looking for—lots of young, educated workers with no auto experience. Once they were trained to build cars the new, leaner way, these youthful cowhands and clerks would form a new generation of Mexican auto workers, the Detroiters surmised. Ford sent workers to Spain and Japan for training and began building a \$500 million clone of a Mazda plant.

TRENDSETTER. By late 1987, the new plant was pumping out Mazdas disguised as Mercury Tracers and shipping them to California. The cars were cheap. But they also had to match Japanese quality, and surprisingly, they did. Within two years, Hermosillo was winning quality awards. Researchers at Massachusetts Institute of Technology proclaimed Hermosillo a trendsetter and profiled it in a book, *The Machine that Changed the World*.

Ford now describes Hermosillo as a stepping-stone for both personal and regional development. When workers step from the dusty, scorching desert into the air-conditioned plant, with its new Japanese robots and stamping machines, they are clearly passing from the Third World into the First. Ford drills this point home, emphasizing the educational and technical side of its operation. Workers are called "operators" or "technicians." In a seven-week program, trainees are called *becarios*, or scholarship students. They study statistics and ergonomics. Only *becarios* who pass tests with an 80% grade are summoned to a graduation ceremony and given diplomas. "That day, they get their blue-and-white Ford uniforms and a job," says Sergio León, a personnel manager.

By contrast, most U.S. plants haven't hired new workers in years, since the domestic industry has contracted so much. These experienced workers typically get a few days of training each summer when their plant shifts to producing the next year's models.

If the inspiration at Ford is ascension to the First World, the quality fervor at GM's Ramos Arizpe plants, some 1,000 miles east of Hermosillo, borders on the religious. Workers are grouped into



DODGE TRUCKS AT THE BORDER IN LAREDO, TEX.

teams, like Hermosillo's, and undergo intensive quality indoctrination. As a result, the GM plant looks like a shrine to quality control. Blue triangles hang on every wall, reminding workers of the GM triad: quality, productivity, people. Quality credos are posted in the hallways, hammering home the same themes. The symbols, credos, and hymns are necessary, says Leo Durón, the training director, "to keep the faith alive, so that the new people keep believing." But naturally, workers joke about management's crusade and admit to their own foibles, like coming to work hung over from time to time.

GLEAMING BUICKS. But they're also making good cars. In five years, Ramos Arizpe has become GM's top plant. Graphs covering the bulletin boards remind the Mexicans that they are outscoring their U.S. and Canadian counterparts in Oklahoma City and Ste. Thérèse, Quebec. GM's engine plant in Toluca, close to Mexico City, has adopted a similar program, with equally impressive results. It has been three years since GM auditors last found a defect in one of Toluca's engines. Toluca managers compare their plants "to the world-class foundries in Japan and Europe," says Plant Manager Gonzalo García, with nary a glance to the U.S.

GM's success in Mexico is a testament to labor-intensive manufacturing. Since each car built in Mexico saves the company \$700 to \$1,000, managers say they've no reason to automate until

Mexican salaries rise toward the U.S. level—eight times higher. Unlike Ford's automated Hermosillo factory, Ramos Arizpe has only one robot, in the paint section. Other auto companies are also betting on the labor-driven quality. Nissan's new plant in Aguascalientes will have only half the automation of its transplant in Smyrna, Tenn. "I'm confident we'll produce higher quality than Smyrna," says Nissan Mexican President Shoichi Amemiya.

To meet their quality goals, GM workers in Mexico conduct meetings nearly every day, often in glass booths on the factory floor. While gleaming Buick Centurys roll past the booth, workers gathered inside review chronic problems. One day recently, a group studied a chart of hazards to the cars' paint finish. Too many workers, they noted, were circulating in the plant with exposed belt buckles and key chains. "Each week, we pick out one discrepancy to work on," says Mario Estrada, a team leader.

Even though they want to reap more minor miracles of industrial relations, the Big Three know they can't move too fast. As with a \$750 million retooling of the Ford engine plant in Chihuahua, Detroit is not announcing new plant openings in Mexico as much as it is gearing up production at existing facilities. This reflects Detroit's cash woes and overcapacity in the U.S. And keeping a low profile makes political sense—on both sides of the border.

Officials worry about enraging the UAW and fanning opposition to the trade talks. They also want to avoid stoking fears of closings at the older plants near Mexico City. Such concerns could spark costly strikes and protests. Only two years ago, a wildcat strike at Ford's Cuautitlán plant bottled up production for months. Later, an "official" union goon squad attacked wildcat strikers with guns and pipes, killing one worker and poisoning labor relations. More such conflicts could occur, especially in Mexico's Rust Belt around the capital. There an older, more militant work force may break away from official unions and fight to keep jobs from migrating north.

While openings and closings of assembly plants make the headlines today, much of the north-south job war in coming years will center around auto parts, not finished cars. For now, Mexico's auto boom is keeping U.S. auto-parts makers busy. But changes are ahead. Already, the Big Three, as well as Japanese and German auto makers in Mexi-

are pressing suppliers to move south. Shipping shipments from the Rust Belt is expensive, they say. And transport snafus in Mexico interfere with the plants' just-in-time programs. As the Mexican auto industry grows, parts makers will face mounting pressure to move or team up with a Mexican partner. Says University of Maine's Morici: "The Mexican auto-parts sector has no place to go but up." As they look into the future, auto executives can see other pressures building. For now, the Mexican government and the unions it controls are subsidizing Detroit's migration by holding down wages. But with time, Mexican auto workers surely will flex their muscles and demand higher pay. That will put the pressure on Detroit's south-of-the-border profits, but it might create

enough economic vitality to ease pain back home. More money in Mexican pockets should pay off for both countries, a trend that could be glimpsed in Ramos Arizpe last summer. When GM handed out profit-sharing envelopes to workers, averaging \$2,000, hundreds raced north to buy used cars in Texas.

UNSTOPPABLE. That hardly spells quick relief in Detroit, where the future is as murky as March slush. The question there and across America is how to soften the blow for thousands of auto and auto-part workers. Forced to raise their market value, many, such as Chrysler's Schultz, are taking college courses, training themselves for new professions. But the challenge of how to live in the global economy isn't one that individuals can meet alone. Instead, a national com-

mitment will be needed to find a place for displaced U.S. workers in the new North America.

That has to happen sooner rather than later. No matter what happens at the political level, the merger of Detroit South and North is unstoppable. This is just the first taste of the drama that will be played out across hundreds of industries sweeping up millions of workers on both sides of the border. Joining the First and Third Worlds needs careful managing. A botched job could lead to recriminations for decades to come. But done right, the new continental alliance could revitalize America's hard-pressed industries for the next century.

By Stephen Baker in Ramos Arizpe, with David Woodruff in Detroit and Elizabeth Weiner in New York

HOW DO YOU COMPETE WITH \$1-AN-HOUR WAGES?

Margaret McAvoy can't forget the scene: more than 3,000 friends and neighbors standing outside in a freezing morning drizzle last November. They had been waiting up nine hours to apply for 180 part-time, \$5-an-hour jobs at a new Wal-Mart store. To McAvoy, Owassee County's director of employment and training, it was a sad commentary on job prospects for the 16,322 citizens of Owosso, Mich. "Look, I'm not a politician," she sighs. "I'm the person looking at the guy across from my desk and hearing every day, 'I'm unemployed, Margaret. What do I do?'" Located on rolling farmland between the faded industrial powerhouses of Lansing and Flint, Owosso now finds itself in the middle of the debate over Mexico's growing auto industry, a North American Free Trade Agreement, and U.S. jobs. Its pain and prospects are being shared by countless small factory towns across America. Last year alone, five auto-parts makers shut their doors in Owosso, costing the city 720 jobs. Of those jobs, 58% were transplanted to Mexico. Owosso's average hourly wage of \$6 was \$8.70 below the national industrial average, but no competition against the \$1 an hour or so paid in Mexico.

BILLS TO PAY. But even in Owosso, where the jobless rate now hovers at 12%, there's debate about whether Americans should cling to low-paying, unskilled jobs. City Manager Gregg Guetfscow shrugs off the losses, saying that kind of employment offers scant hope for the future. Instead, he points to



CRUSADERS: SOME EX-WORKERS ARE SUING ELECTRO-WIRE

new jobs at an expanding local hospital and college. "We ought to be able to attract companies in the service sector, rather than industry," says Guetfscow.

That approach may revive Owosso in the long term, but it won't help Penny Reha pay her bills. The 31-year-old mother of three began making wiring harnesses for trucks at Electro-Wire Products Inc. in 1986. It paid just \$6.35 an hour, but it helped when her construction-worker husband was between jobs. And she felt secure: In 1985, Electro-Wire built a new, \$3 million plant, triple the size of its old factory. Eager for the 150 promised jobs, the city sold the company a seven-acre site for \$1.

At first, all seemed rosy. Workers say the plant regularly won lofty quality ratings. But Electro-Wire had been steadily adding plants and production in Mexico since 1984. Work slowed, then stopped in April, 1990. Some workers even had to crate the plant's machinery for shipment to Texas; they say it went from there to Juárez, Mexico. By then, Reha was laid off. "Why did they have to take it to Mexico?" she asks. "Are they so greedy that they can't help anybody but themselves?"

Electro-Wire Marketing Director Richard J. Wheeler insists the company had to "look at the big picture" in deciding how to manage the 26 facilities and 4,000 employees it has scattered across North America. He argues that free trade should result ultimately in an increase in U.S. jobs. But he won't give any specifics about the privately held, Rochester Hills (Mich.) concern—or even where its offshore plants are. Says Wheeler: "We try to be a good corporate citizen."

Two hundred and fifty-four of Electro-Wire's former employees don't buy that and are suing the company for allegedly failing to give them adequate notice of their layoffs. The lawsuit went to trial Mar. 9 but could drag on for weeks. Nor will 60 days' pay undo the trauma. For Reha and other co-workers, unemployment benefits ran out months ago. Now, in their farmhouse home, she and her unemployed husband scan the want ads daily. "You ain't got nothing if you ain't got hope," she says. "But I wonder what my kids are gonna do."

By Greg Bowens in Owosso, Mich.

VALUE LINE: TOO LEAN, TOO MEAN?

CEO Jean Buttner may be jeopardizing the future of the company

BUTTNER WITH DAD, COMPANY
FOUNDER ARNOLD BERNHARD



On Oct. 30, the last in a series of scathing protests was posted on a bulletin board at Value Line Inc. In the name of "all employees," the anonymous memo attacked Jean Bernhard Buttner, the company's chief executive, for her "self-centered, mean-spirited, and unceasing quest to wring every last penny out of your employees' pockets" and demanded that she resign and "allow professionals to step in and create real value here." Buttner responded by ripping out employee bulletin boards on three floors.

Value Line, publisher of the famed *Value Line Investment Survey*, beloved by generations of stock pickers nationwide, is a company in turmoil. Ever since Buttner inherited control of Value Line from her father in 1987, her increasingly autocratic and yet petty exercise of the prerogatives of power has brought an unceasing stream of resignations and firings that has shrunk the company's work force to about 325 from 425—a drastic decline for a company that epitomized lean and mean long before the condition was fashionable.

Reduction in staff made some sense after the stock crash of 1987 sent the *Investment Survey's* circulation into a tailspin. But the bull market that began in 1990 has pushed circulation up sharply. With profits running 60% ahead of last year through the first six months, Value Line is expecting record profits for the fiscal year ending Apr. 30. The company's coffers are overflowing with idle funds, and still Buttner shows no sign of loosening the screws. To the contrary, she set the tone for this year's budget planning by decreeing that under no circumstances would Value Line increase its outlays for medical insurance in 1992.

'TIME BOMB.' Forget, for the moment, the lucrative growth opportunities that Value Line may be missing in its publishing and money-management businesses. Any company can reduce its work force by only so much without risking implosion. "Jean Buttner has created a time bomb," warns one former senior Value Line executive. "The only question is when it goes off."

Buttner declined to be interviewed. However, extensive interviews with current and former Value Line employees and a review of company documents suggest little cause for optimism. The company's work force seems so demoralized and embittered that even hefty raises might not be sufficient to induce many employees to remain. "It's gotten so bad that everyone I know at Value Line—and I mean everyone—just wants out as soon as the job market picks up,"

Daniel DeLosa, a former employee who was fired last year. While Value Line's immediate survival is not in doubt, the company's reaction does seem to have developed a worrisome momentum of its own. Sources say that Buttner reads external indications of her interest in new methods

presented methods. The recent runup of Value Line's stock, which took off in January after earnings declined for years (chart).

Like all companies whose fortunes are tied to stock market volume have been hit. And even after the runup, the market's underlying message appears to be skepticism, not validation. The stock is trading at only 15 times earnings, well below the price-earnings ratios prevailing in most sectors of the over-the-counter market. Even the Dow Jones Industrial average boasts a p-e in excess of 20. "Value Line has been delinquent in not leveraging its historic franchise,"

Charles M. Kulp, an analyst who backs the company for the brokerage of Hey & Willcox Inc.

PENNY DAYS. In concept, Buttner from the outset has advocated building the company's businesses. Indeed, she regularly subjects managers to table-laying harangues for failing to hit revenue targets. In practice, though, Buttner's ambitions have been undercut by what her underlings describe as an almost visceral aversion to laying out corporate funds for any purpose in minuscule amounts. "Her attitude is that the money is all hers, and she won't want to part with a penny," says a manager. According to this person, in a meeting two years ago, Buttner actually said that she felt she was taking money out of her own purse every time she signed a company check.

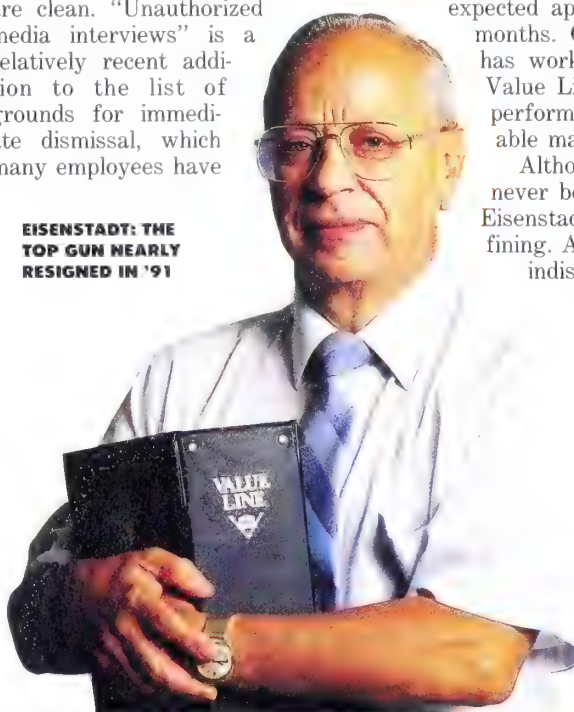
In a sense, she is. Although Value Line is a public company, Buttner and her descendants of founder Arnold Bernhard still own 80% of its shares—a stake currently worth close to \$300 million. Buttner, 57, holds a majority of the company's stock and as chairman and CEO controls every aspect of Value Line's affairs, brooking no dissent. "All the people who used to stand up to her are gone or not inclined to risk it anymore," says a manager. Since 1988, Value Line's annual outlay for salaries and benefits has fallen by \$1.8 million, or 10.6%, despite a 76% jump in Buttner's own pay, to \$333,350. Besides simply leaving vacant many positions, Buttner froze salaries for 18 months, replaced senior employees with lower-paid workers, and opted away at profit-sharing, vacations, and health benefits.



While cutbacks of this sort are hardly unique to Value Line, Buttner antagonized employees with such unconventional tactics as ordering all medical reimbursement claims submitted to the personnel department instead of to Value Line's insurance carrier. This inflamed suspicions that workers who ran up sizable medical bills would be penalized at salary-review time. Many employees found Buttner's complaints about runaway medical insurance premiums especially galling, knowing that the steep cost of providing around-the-clock care for her ailing mother, Janet Bernhard, was largely borne by the employee health plan.

Money is not the only root of discontent at Value Line. Buttner has bargained employees with memos regulating virtually every aspect of their work life. Every employee must sign in by 9 a.m. and sign out when leaving. Anyone who signs out for the day before 5 p.m. or fakes a time of arrival or departure is subject to discharge. Buttner hates messy desks, and requires department heads to file a "clean surfaces report" at the end of each workday certifying that all desk tops in their areas are clean. "Unauthorized media interviews" is a relatively recent addition to the list of grounds for immediate dismissal, which many employees have

EISENSTADT: THE TOP GUN NEARLY RESIGNED IN '91



taken to calling simply "G. F. I. D."

DeLosa says that he was fired from his sales position because he was best friends with a vociferous critic of Buttner's who had been fired a few weeks earlier, ostensibly for an unauthorized television appearance. DeLosa was denied a severance pay-

ment of \$1,240 when he refused to sign an agreement promising not to sue Value Line. The contract contained a clause that would have imposed a \$1 million penalty on DeLosa for so much as disclosing the existence of the agreement to anyone but a relative.

SKELETON CREW? Company sources say that the most imminent danger Value Line faces is that on any given Friday it will be unable to produce the *Investment Survey*, which, with more than 100,000 subscribers paying \$535 apiece, generates about two-thirds of Value Line's \$70 million in annual revenues. Within the last year, the operational staff has been stretched so thin that *Survey* editors no longer feel certain that computer snafus can be corrected within 24 hours—an eternity in weekly publishing.

Buttner also has flirted with danger of another sort by demeaning Value Line's resident guru, Samuel Eisenstadt. Now 70, Eisenstadt joined Value Line in 1946. As chief statistician, he laid the mathematical foundation for the company's celebrated "timeliness" ranking system. Since 1965, Value Line has ranked stocks in five categories in order of their expected appreciation over the next 12 months. Over the years, the system has worked splendidly, as stocks in Value Line's top category have outperformed the market by a considerable margin.

Although the ranking system has never been fundamentally modified, Eisenstadt is always tinkering and refining. As the system's keeper, he is indispensable to Buttner, whose understanding of its work-

ings are said to be rudimentary at best.

Buttner has boosted Eisenstadt's pay from \$143,565 in 1987 to \$262,500. On the other hand, Buttner strictly regulates her top statistician's public statements, and in a barefaced try at revising history insists her father was the creator of the rating system.

Eisenstadt is a genial,

easygoing sort who idolized Bernhard and is fanatically loyal to Value Line. But even Eisenstadt's loyalty has a limit. A year ago, Eisenstadt was invited to appear on *Wall Street Week With Louis Rukeyser*. When the show's producer came to Value Line to meet with Eisenstadt, Buttner intervened and told the visitor exactly how she wanted her employee introduced. When the producer refused to promise that Eisenstadt would not be described as the creator of the rating system, Buttner canceled his appearance. Eisenstadt threatened to resign, and Buttner relented.

Eisenstadt declined to comment. "I'd like to cooperate, but I can't," he says. "Those are the rules."

To a degree, Buttner is carrying on her father's legacy. A proprietor with a capital "P," Arnold Bernhard saw his employees as cogs in the wheel of Value Line's mechanistic approach to investing. To apply the Value Line ranking system to individual companies, Bernhard didn't need the sort of star analysts prized by the big Wall Street brokerages. So he hired greenhorns and retreads and paid them meagerly, accepting that many would jump to higher-paying brokerage jobs in a few years.

It worked because Bernhard was a brilliant marketer who knew his business inside and out. Despite high turnover at the entry level, up top Bernhard developed a deep cadre of talented, loyal managers, most of whom have left. "These people were such a pleasure to work with," says Russell Wayne, a 23-year veteran who quit in 1990. "If the company were sold, I think a lot of us would like to go back."

CAUTIOUS APPROACH. In his later years especially, Bernhard approached new ventures cautiously, largely because few new businesses could hope to match the *Investment Survey's* 30% to 35% operating margins. Nonetheless, the company did diversify profitably into the money-management business, added several new publications, and began selling investment software. Value Line grew slowly but inexorably.

Before joining Value Line in 1982, Buttner's business experience was confined to acting as vice-chairman for her ex-husband's interior design firm. "I'm not a brilliant securities analyst," she told a reporter shortly after her 1984 promotion to president. "My main effort is to coordinate a team effort. What qualifies me to run this company is that my interests are to see that other people's interests are served."

Eight years later, Buttner is every bit the autocrat Bernhard was. However, where Bernhard was imperiously decisive, his daughter is considered imperi-

ously indecisive. She does indeed involve others by setting up committees and commissioning consultants' reports but in the end often takes no action. This trait has combined, with her tightfistedness to frustrate almost all of her staff's sporadic attempts to innovate.

MISSED BOATS. Most damagingly, Value Line has failed to capitalize on the global investing trend. Throughout Buttner's entire reign, the company has been studying the issue of exporting the *Investment Survey*. To date, though, Value Line has done little more than repackaging its existing coverage of Canadian stocks into a separate Canadian edition.

Value Line also essentially missed the huge boom in money management in recent years, even while its fund managers were compiling generally impressive results. In the pension fund field, Value Line's good performance record was ren-

dered largely moot by high turnover among its portfolio managers. For example, Value Line manages a \$60 million account for BP America Inc. that has been managed by five different people since mid-1988. Turnover is anathema to pension consultants, and many have stopped even considering Value Line.

Like her father, Buttner has been adamantly opposed to selling Value Line. Her opposition may soften when the next turning of the stock market cycle sends the *Survey's* circulation into its customary bear-market nosedive. As long as the Value Line rating system remains intact, the company will endure in some form. The question is whether Value Line can escape the fate of that long list of family empires that have foundered in transition from the first to the second generation.

By Anthony Bianco in New York

PEOPLE

SOLLY'S MAN IN TOKYO: 'HE'S A MONEY MACHINE'

'Sugar' Myojin's operations pulled in a sweet \$450 million in 1991

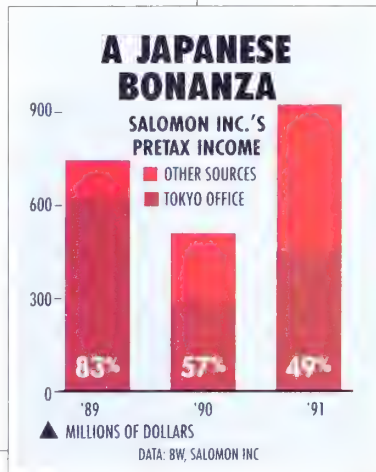
Once when he was in London, Shigeru Myojin, the 42-year-old head trader at Salomon Brothers' Tokyo office, lost his temper when a trade went bad and hurled a telephone across the floor, destroying an \$80,000 trading board. Sometimes, he carries a bat and wears a U.S. Army helmet. He has ridden a bicycle around the trading floor. One time, he covered a colleague's telephone and desk with shaving cream. He recently threw a cream pie in the face of a colleague about to get married. He keeps a desk piled high with good-luck charms. Before the quarterly expiration date for futures contracts, Myojin sometimes leads members of his staff of 80 to say prayers at a Shinto shrine.

Myojin also makes money. Lots of it. In 1991, his ingenious application of sophisticated arbitrage techniques earned Salomon \$450 million, according to sources close to the firm, or nearly half of Salomon's \$919 million in total pretax profits (chart). On Feb. 10,

that golden touch won Myojin a spot on the 12-man executive committee of Salomon Brothers, Salomon Inc.'s investment bank. The steady stream of fat profits from Tokyo has masked swings in Salomon's U.S. business. When Salomon lost \$27 million in America in 1990, sources say Myojin kicked in \$265 million, mainly from proprietary trading of Japanese stocks and Nikkei-index futures. "He's a money machine," says a colleague. "It's very possible he will become more dominant in the future."

Salomon's reported profits from Asia are much lower than these figures. But that may be because many of Myojin's trades are booked in New York.

Universally known as Sugar—nicknamed by a Texan colleague in London who could not say Shigeru—Myojin seems happiest patrolling the trading floor. "The reason I remain a trader is that I like the contest," he told *BUSINESS WEEK*. "It's intelligent and tough." Armed with \$500 million in capital, triple the firepower of



er U.S. brokerages in Tokyo, and a work of customers nurtured by hard-
ing sales chief Toshiharu Kojima,
ojin has more than \$4 billion in in-
ments. Much of this Myojin steers
ween the cash markets and futures
ake advantage of price disparities

THE A SPONGE. Myojin has thrust Salo-
n into a bitter debate over program
ling in Japan. The Big Four securi-
firms—Nomura, Daiwa, Nikko, and
aichi—have criticized U.S. firms in
yo for importing what they claim is a
urge on their markets. That hasn't
oped Myojin from pushing the mar-
s limits. When colleagues dreamed
an option to allow investors to swap
for dollars, "we created a huge arbi-
ge position for Sugar," says a former
eague. "But two or three times a
, he'd come to our desk and keep
hing: 'How much more can we do
ay?'"

Myojin, a slightly built man whose

headquarters to learn the techniques of
arbitrage. "He's like a sponge," says a
former colleague. "He absorbs new
ideas very quickly." Returning to Tokyo,
he hustled other traders into the office
by 6 a.m. for cram sessions. When the
market opened in October, 1985, Myojin
realized the futures were overpriced. He
sold them and bought bonds, thereby
profiting from the mispricing. "No one
else was doing it," he says. "But after a
while, the Big Four got furious. They
suddenly realized they had a serious
competitor in their own backyard."

With the field almost entirely to
himself, Myojin raked in enormous
sums. In 1989, insiders say that he
earned the firm an incredible \$565 mil-
lion in profits from fixed-income arbi-
trage alone. Salomon executives gave
him a \$4.6 million bonus on top of his
salary of \$368,000. Despite that heady
figure, sources say Myojin complained to
top brass when another Salomon trader

Sugar [at the Big Four] was not warm."

When the Tokyo stock market col-
lapsed in early 1990, many Big Four offi-
cials attacked Myojin for his huge Nik-
kei-index positions, which they said
exacerbated the crash. Deryck C.
Maughan, Salomon's chief operating of-
ficer and former head of the Tokyo of-
fice, soothed the Finance Ministry. But
Myojin held firm. He eventually un-
wound some of his positions, at a profit,
but he denies he caved in to pressure.
"The Big Four tried to blame the crash
on us, but the market was overpriced,"
says Myojin. "They were wrong—and
they're still wrong." Indeed, rivals such
as Nomura are now piling into index
arbitrage. That has pushed down mar-
gins, but he still made \$35 million on
straight index arbitrage in 1991.

Unlike many traders, Myojin is not ob-
essed with the markets. He leaves at
5:30 p.m. each evening and seldom dis-
cusses the market with his wife or two



■ Salomon's
Tokyo head
trader Shigeru
Myojin, 42:
'I wanted to be
No. 1, and I
wanted to do it
in the major
league'

id-fire talk often explodes into sud-
peals of laughter, says he did his
t arbitrage trade when he was a
ng salesman for Yamaichi Securities
bicycling around Shizuoka west of
yo to peddle stocks. He persuaded an
estor to substitute Nippon Telegraph
Telephone Corp. bonds for low-paying
anese government bonds in his portfo-
o, which was considered a bold move
the time. After two years, Yamaichi
signed Myojin to London, and in 1979,
jumped to Salomon, where he eventu-
became head of the firm's Tokyo
d operations. "I wanted to be No. 1,
I wanted to do it in the major
gue," he says.

His big chance came in early 1985.
aring that futures on Japanese gov-
ment bonds would soon be launched,
traveled to Salomon's New York

walked off with \$23 million in 1990.

Myojin got another crack at virgin ar-
bitrage territory in late 1988, when trad-
ing began in Japanese stock-index fu-
tures. Inexperienced Japanese brokers
shied away. Yet chronic overvaluation of
the Nikkei-225 futures contract permit-
ted what Myojin calls "almost risk-free"
arbitrage. "It was an amazingly simple
game," says Myojin. "But no Japanese
firm had figured it out." He did, earning
\$250 million in equities-related arbitrage
in 1991 alone, insiders say.

'STILL WRONG.' Myojin delights in taking
on the Big Four. At one Japanese bond
auction in 1988, he angered Nomura Se-
curities Co. and others when he bought
100% of a Japanese government long
bond issue, forcing other firms to scram-
ble for bonds to fulfill their orders. Says
an ex-Nomura official: "The feeling for

daughters. He doesn't keep a trading
terminal at home and has avoided a car
phone or a pocket pager. To build cama-
raderie, he invites the trading team over
for barbecues. Recently, he and his wife
rented a go-cart facility where the trad-
ers were able to speed around the track
at 60 mph.

Also unlike many traders, he does not
brood over losses. During his worst
month, sources say, he dropped \$150 mil-
lion. Last November, he lost \$50 million.
"I have a very short memory," he says.
"I don't remember pain." For all his an-
tics, Myojin takes his job very seriously.
"This guy is driven to be a legendary
figure," says one colleague. "This is an
American dream come true for him."
For Salomon, some damaged office
equipment is a small price to pay.

By Ted Holden in Tokyo

AN END RUN AROUND THE TAXPAYER

Local pols are paying for more new projects with lease-backed bonds

In 1989, politicians in Brevard County, Fla., decided they needed a new headquarters building for the county government. There was only one problem: Tax-sensitive county voters were unlikely to approve a bond issue to raise the money. What to do? The politicians opted for a novel ploy to bypass the voters. First, they had a trustee, a state bank, issue \$24 million worth of tax-exempt securities to pay for construction of the building. The county then agreed to make what amounted to yearly lease payments to the bank to pay the interest on the bonds. Unlike interest on conventional munis, lease payments are not a binding obligation on a municipality, so no voter approval is required.

It should be no surprise that municipal lease financing is booming. With demand for services growing at the same time that voters are becoming more unwilling to cough up or approve raising the necessary cash, state and local governments have been resorting to lease financing to fund such needed capital projects as schools, prisons, and courthouses. Issuance of lease-backed securities, known as certificates of participation or lease revenue bonds, has doubled since 1985 and hit a record high of more than \$13 billion in 1991 (chart). Since 1980, \$66.9 billion worth of lease-backed securities have been issued. Hobbled by Proposition 13, California has been the biggest issuer, with over 50% of all new issues in 1991.

ANGRY VOTERS. Yet the Brevard example illustrates the increasingly visible downside of the lease-financing trend. For one thing, voters don't always like being bypassed. Last year, Brevard County residents organized a vigorous protest against the building that focused not only on their lack of input in making decisions but also on the structure's location. "Voters thought they had the budget in check by different voter referendums," says Robert B. Lamb, profes-

sor of municipal finance at New York University's Stern School of Business. "But the inventiveness of investment bankers, lawyers, and issuers to, in effect, do an end run around constraints, has enabled tremendous growth in municipal leasing."

Stung by the protests, Brevard's politicians floated the idea of holding a referendum on whether to stop the lease payments on the nearly completed build-

documents state that they have a "right" to stop payment, says John J. Hallacy, manager of municipal research for Merrill Lynch & Co. "No one buys these things if they think they won't get paid."

Incensed by the possibility that Brevard might renege on that obligation, muni underwriters, ratings agencies and the giant Municipal Bond Insurers Assn., which insures the lease issue, descended on county officials. Warnings flew of possible downgrades of the county's outstanding debt and restrictions on its access to debt markets. Chastened, Brevard nixed the referendum proposal.

SHOCK THERAPY. Yet some cash-strapped communities may have no choice but to stop lease payments. The Richmond (Calif.) Unified School District has missed two \$558,000 payments since last July. Rather than bail the district out, as many expected, the state seems to want to make it an example to dissuade other school districts from issuing risky debt and to encourage greater scrutiny of such issues by underwriters and investors. The various parties are now negotiating.

That, in turn, has raised the murky question of what happens if a municipal lessee goes bankrupt. Because of the weak structure and security of some lease financings, the legal recourses for bondholders of issues that have defaulted and/or filed for bankruptcy are few and undefined. "Bankruptcy is a pretty gray area in municipal leasing," says Barbara Flickinger, manager of California local ratings at Moody's Investors Service Inc. "A lot of people are concerned."

Given the negative attitude of voters to anything that hints of taxation, municipal lease financing is expected to keep growing. "This market is here to stay and will continue to expand in importance for government financing," says Sally Rutherford, a senior vice-president with Standard & Poor's Corp. But there will be bad times. "I expect we'll have some near misses" where payments will be in jeopardy, says Richard A. Ciccarone, of the National Federation of Municipal Analysts. "And some will not be near misses, but hits." If that happens too often, the high-flying market may lose a lot of altitude.

By Suzanne Woolley in New York



ing. But that, in turn, provoked the ire of a second and perhaps even more dangerous group of protesters: the municipal-bond industry. A referendum would highlight for investors the uncomfortably nonbinding nature of lease payments.

Muni underwriters have been very successful in selling lease-backed issues to investors, since interest on the bonds can be 30 basis points higher than the same issuer's straight debt. Unlike conventional municipal bonds, however, they aren't backed by the "full faith and credit" of the municipality. And since payments often must be made from operating funds, and compete with expenditures for, say, police, they are vulnerable in times of fiscal stress. Still, underwriters and investors assume government-sponsored issuers have a moral responsibility to keep up the payments. "Issuers have to realize that there's a real obligation here, even though the



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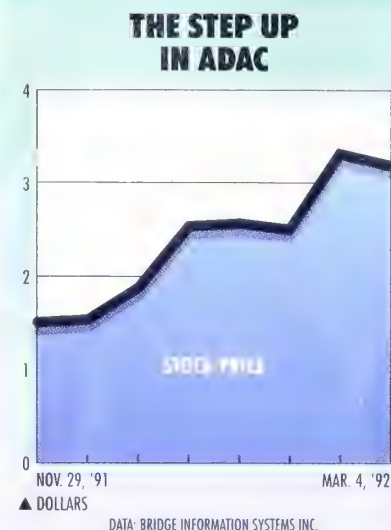
Veteran health care investors might recall ADAC Laboratories, a manufacturer of medical-imaging equipment. But their recollections may not be pleasant ones. Red-hot in 1983, ADAC's shares traded as high as 27, only to collapse into the single digits later that year and to sink below \$1 per share in 1990.

Well, ADAC is perking up. Since Thanksgiving, it has more than doubled to 3¼. Analysts Allan S. Roness and Stuart M. Linde of Fahnestock & Co. say they know why: new products, new management, and a new dividend. More important, they think the runup has just begun. "The stock could double this year," says Linde. "And next year it could go to 10."

SHUTTER MAGIC. ADAC's comeback centers on nuclear medicine imaging, in which doctors inject radioisotopes and use a "gamma camera" that detects the rays. In conjunction with a computer, the camera creates an on-screen image. ADAC's Dual Head Genesis is a two-head camera that produces a high-resolution image than the older single-head cameras. ADAC's Pegasus workstation is a computer that processes the images and assists in diagnoses. A Pegasus upgrade is due out later this year, as are three new cameras.

The new-product cycle should put some zip into earnings. ADAC cleared less than \$1 million profit, only 2¢ per share, in the fiscal year ended Sept. 30. Operating profits had increased 73%, but the company took a \$2.8 million restructuring charge and a \$1.75 million charge to settle a 1990 shareholder lawsuit. The suit alleged that the company and its former chairman and former president issued false statements regarding the company's financial condition—which ADAC denied.

The Fahnestock analysts estimate sales of \$116 million and profits of \$10 million, or 21¢ a share, in the current fiscal year. For next year, they see sales of \$133 million and profits of \$15 million, or 31¢ a share. If they are right, that gives ADAC a p-e ratio of 15, cheap for a medical-equipment maker. ADAC is up against big guns like General Electric and Siemens. Stan Czerwinski, recently promoted to chairman and CEO, says that ADAC is able to com-



pete by stressing innovation and annual new-product introductions.

ADAC is in decent financial shape: \$27 million in working capital and no long-term debt. It recently reinstated a 4¢ per share quarterly dividend. That's a 4.9% yield. Linde thinks the dividend, plus the expected profit pickup, will attract institutional shareholders that buy only dividend-paying stocks.

A few investors plunged in already. Several Fidelity mutual funds together own some 2 million shares, or 4.8%. Rockefeller Financial Services, which manages the family's investments, holds about 1.2 million shares, or 2.8%. ADAC employees own some 24%.

MURPHY OIL: SLICK PLAY?

Energy prices are weak. What better time to go stock-shopping in the oil patch? Murphy Oil, trading at 3¼ on the Big Board, is the choice of some savvy pros. The oil and gas exploration and production company is light on debt, heavy on cash—and its \$1.20 dividend provides a 3.5% return while waiting for the upturn.

"It's the cheapest stock in a cheap industry," says Kenneth Hackel of Systematic Investment Management, which buys stocks based on their cash flows. Murphy sells for 11 times free cash flow—which Hackel defines as the most cash a company can distribute without impairing its growth. The S&P industrials sell at 23 times free cash flow; domestic oil companies, 14.1.

Why so cheap? For starters, the company lost 28¢ a share last year after earnings of \$3.36 in 1990. Even the

highest 1992 estimate, \$2.30 a share, falls far short of that. "The company has no pizzazz, so Wall Street ignores it," says Mark H. Madden of Pioneering Management, which holds 1 million shares. Madden thinks that when the economy revives, Murphy's profits will rebound sharply. The company has been upgrading its refineries to produce more profitable gasoline and jet fuel and less heavy oil and asphalt.

Bill McAdams, whose Massachusetts Capital Development Fund owns about 500,000 shares, suspects that the company may repurchase stock to offset some of the 9.7 million shares issued last year to buy out the minority shareholder in its ODECO subsidiary. And the money's no sweat. Murphy could use some of the \$372 million it got last month from the sale of ODECO's money-losing contract-drilling operation.

"They could buy others' reserves, or it may be the cheapest reserves are their own, and they buy in their stock," says George Wyper, chief investment officer for Fund American Enterprises, which has 2.9 million shares.

A REIT FOR THE LONG HAUL

Don't bet the house on an upturn in the commercial real estate market. But you might want to make a side bet on Property Capital Trust, a real estate investment trust that trades on the Amex at 5. Robert S. Natale, editor of Standard & Poor's *Emerging & Special Situations*, believes that investors who can hold on for the real estate recovery will ultimately quadruple their capital.

Natale thinks PCT—which traded as high as 27 in 1987 and as low as 4 last year—has its worst days behind it. Most of some \$200 million in properties and the properties underlying its mortgages were built before the mid-1980s. That means assets were not acquired at top-of-the-market prices, so risks of further large write-offs are low. Still, PCT is not yet in the black. Natale is projecting a loss of 75¢ a share for the fiscal year ending July 31, an improvement over the \$1.23 per share loss in fiscal 1991. Book value is over \$11 a share, and that, he thinks, will prevent the stock from slipping.

In its heyday, PCT earned an 8% return on assets. But now, Natale's shooting for a 6% return. That would produce earnings of \$1.30 a share. By his reckoning, it's enough to merit a stock price of over \$20 a share.



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WILDLIFE POACHERS AND SMUGGLERS: ON THE ENDANGERED LIST

But the crackdown on traffickers in exotic animals could be set back if the ivory-trade ban is lifted

Business was brisk one day last July at Voraphot Harnsawat's private zoo near Bangkok. The South Korean tourists that had just alighted weren't there to look at exotic animals, though: They planned to eat them. Lunch fell through when the police showed up. They liberated two tigers, six leopards, and 67 deer of various types—all endangered species awaiting slaughter—and seized a refrigerator of paws from rare Asiatic black bears.

The bust was part of a campaign to end Thailand's role as the world hub of illegal wildlife trade. In the 1980s, with help from their government, Thai dealers laundered shipments of everything from rare orchids to South American caimans and Indonesian orangutans. They got papers for these in Bangkok, then sent them to zoos and traders in Japan, Europe, and South America. But last year, foreign governments and environmentalists took a stand.

'KAPUT.' The U.S. and three European countries threatened to ban \$1 billion in legitimate imports of Thai flora and fauna, while British activists vowed to boycott Thailand's \$3 billion tourism industry. Soon after, the Thai government said it would outlaw commerce in the 1,000 species covered by the 112-nation Convention on International Trade in Endangered Species (CITES). The Thai legislature passed the ban in January and has arrested hundreds of alleged traffickers. "For now," says Kurt Schaefer, a former Bangkok bird trader, "Thailand is kaput as a trading place."

Around the globe, setbacks have been dealt recently to the \$5 billion annual trade in exotic plants and wildlife, one of

the most lucrative and loathsome of businesses. A 1990 worldwide ban on ivory imports has slowed the slaughter of African elephants, whose number had dwindled by 53%, to 610,000, in just five years. In 1991, Japan banned imports of shells from endangered hawksbill sea turtles, which were used for eyeglass frames and jewelry boxes. Taiwan, a major user of exotic animal parts for tradi-

Some CITES members dismiss trade bans because they don't always cut demand. Even though CITES prohibits trade in endangered orangutans, for instance, a pet orangutan is a status symbol in affluent Taiwan. Eastern European zoos, which can't afford primates bred in captivity, buy them from smugglers. And in Chinese and Korean communities worldwide, remedies using bear gall

bladders, tiger penises, rhino horns, and oil from Himalayan musk deer are often preferred to modern drugs. "This trade has gone underground," says Keith Highley, Taiwan director of environmental group Earthtrust in Honolulu.

The business is resilient because it's so lucrative. Consider the Senegalese parrot. A trapper gets \$1 for this bird from an African wholesaler, who sells it for \$6 to a European wholesaler. The European sells it for \$60 to a retailer, who charges

\$150. Similarly, the skin of a caiman, bought from a Venezuelan poacher for about \$2, fetches \$400 in Japan, where it's used to make leather goods such as handbags. Last year, CITES investigators uncovered a smuggling ring in Thailand that brought in more than \$60 million a year from skins. In China, a live bear can fetch \$1,200. But sell its parts, and the profits multiply: Bear gall bladders, used to treat fever and chronic liver illness, can fetch \$15,000 a pound in Asia.

QUOTA SYSTEM. Several schemes are being tried to blunt the profit motive. They include breeding exotic animals in captivity and developing substitutes for Oriental medicines. Controlled harvesting also has been successful in parts of Africa, where native populations rely on wildlife for meat and hides. For instance, the Zambian government works with



CHARNEL HOUSE: STORED ANIMAL PARTS SEIZED BY THE THAI GOVERNMENT

tional medicines, has begun enforcing a ban on rhinoceros horns. And Congress may soon limit trade in exotic birds. The U.S., the world's No. 1 importer, brings in \$10 million worth annually.

Such measures face a tough test this month in Japan. The members of CITES have gathered in Kyoto to review the treaty in a meeting that will last until Mar. 14. Some countries will push for stiffer measures against the black-market trade. But several African nations will argue that the elephant population is now at a safe level, and they'll demand a revocation of the ban on ivory. Opponents contend that if any trade is allowed, the price of ivory will soar, stimulating a resurgence of poaching. An equally contentious issue will be bear gall bladders. Demand for the organs has precipitated poaching of U.S. bears.

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tribes in the Kafue Flats region to prevent poaching of antelope. Local hunters have an annual quota and also run hunting and sightseeing concessions for tourists and foreign hunters. This gives the locals a vested interest in the survival of the species. Indonesia and Thailand, meanwhile, want to restrict trading in crocodiles, bears, monkeys, and parrots to those raised on monitored farms. Indonesia has licensed three monkey breeders and 20 crocodile farms.

Still, each approach has drawbacks. Take controlled harvesting. Indonesia lets traders capture 20,000 wild cockatoos of a particular variety each year, a low enough figure, theoretically, to sustain the population. Trouble is, for every cockatoo that reaches market under the legal quota, four others die in the process. "The legal trade is as bad as the illegal trade," says Schaefer. And Indonesian enforcement is woeful. "There are too many ports, too many islands, and too few people watching," says Russell Betts, manager of the Indonesian office of the World Wildlife Fund (WWF).

Captive breeding is controversial, too. Some experts fear that it could legitimize trade in exotic animals—and boost demand. It is economically impossible to breed animals such as giant pandas, rhinos, and gorillas. It also costs less to grab a tiger cub from the wild. "The only way to make poaching uneconomic is to flood the market with tigers and drive down the price," says David Melville, director of the WWF's Hong Kong office.

Policing the farms is tough. How do you tell a farm-bred animal from a captured one? One way, genetic testing, is too expensive to use. Already, Thai authorities have found that some farms are laundries for traffickers: Thai farms raised some 6,000 caimans in 1988—but exported 750,000 skins.

MIXED GRILL. The bust of Voraphot Harnsawat's operation revealed the farm/trafficker link. Voraphot, who didn't respond to BUSINESS WEEK inquiries, claimed in Thai newspaper reports that his 10-building enclave near Bangkok was a wildlife refuge. Police say it was a slaughterhouse. Animals were smuggled

THE GLOBAL IVORY BAN HAS BEEN SO SUCCESSFUL THAT JUST 55 ELEPHANTS WERE POACHED IN KENYA LAST YEAR

in by trawler from Cambodia and Myanmar, according to the *Bangkok Post*. After they were killed, usually by strangulation or drowning, their parts were processed for Chinese medicines.

Because of the raids, some Thai dealers have moved to Cambodia and Vietnam, which don't belong to CITES. And dealers still find supplies of animals in Indonesia and China, where enforcement is lax. When investigators from the British-based wildlife protection group TRAFFIC recently visited a village in coastal Fujian Province posing as Taiwanese buyers, they were led to a chicken farm. Its stock included pelts of a Manchurian tiger, of which only 20 are left in the wild, and of two giant pandas. In China, killing either is a capital offense. Yet dealers seem undeterred.

The Asian preference for ancient cures and aphrodisiacs is partly to blame. Most tiger species are near ex-

inction, but tiger penises are available for up to \$25,000 a pound, in markets such as Taipei's Di Hua Street. Men soak them in brandy and take a slug before sex in hopes of harnessing the animal's libido. For such buyers, "you will never price a tiger penis out of the market," says Chris Brent-Kelly, a Hong Kong animal-parts broker who says he doesn't deal in endangered species.

The same can be said for rhino horn. Most of the 11,000 remaining rhinos are protected in Africa and Asia. Yet poachers kill hundreds annually for their horns, which sell for \$1,500 a pound. Most go to Chinese pharmacists, who grind them into pills to treat fever and congestion. Rhino horns are still legal in South Korea and Vietnam. They're also available on the black market in Taiwan and China, where they are banned.

SUBSTITUTES. If Asian devotees won't abandon ancient remedies, the WWF hopes they'll accept substitutes. A 1991 study at Chinese University of Hong Kong concluded rhino horn pills are as effective as aspirin in controlling fever. But so are pills from cow and water buffalo horns. The WWF hopes Chinese doctors and consumers will take heed.

But for now, the most effective strategy is pressure on countries involved in animal trafficking. The global ivory ban has been so successful just 55 elephants were poached in Kenya last year, vs. 5,000 in 1990 alone. The reason is simple

economics: With no market for finished products, the wholesale price of ivory has plunged from \$23 a pound to \$1.35.

To achieve the same protection for other species, activists say, international development agencies and the World Bank should finance the preservation of animal habitats. But even if CITES continues to support restrictions on bans on trade, endangered wildlife face a precarious future. As long as humans insist on using them for pets or dinner entrees, for medicine or for pelts, none of these species is safe.

By Pete Engardio in Bangkok with Emily T. Smith in New York, Ken Stier in Bangkok, and Margot Cohen in Jakarta

THE FATE OF EXOTIC WILDLIFE

Each year, several million animals from some 1,000 threatened species are trapped or killed for the following markets:

ASIAN MEDICINE Millions of Asians rely on bears' paws and gall bladders, tiger penises, rhinoceros horns, and dozens of other animal parts for everything from treating the flu to enhancing their libidos

FOOD At restaurants in Asia and Europe, gourmet dishes include bear-paw soup, monkey brains, and steaks from endangered deer

PETS AND DISPLAY Exotic species, especially primates, birds, and cats, are prized as pets around the globe. The U.S. annually imports an estimated \$10 million worth of exotic birds, while in Taiwan orangutans are a status symbol. Especially in Eastern Europe and Latin America, zoos that can't afford to buy animals bred in captivity often turn to smugglers

SKINS Each year, millions of endangered mammals and reptiles are killed to supply pelts for clothing and skins for shoes and purses

DATA: CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES, BW

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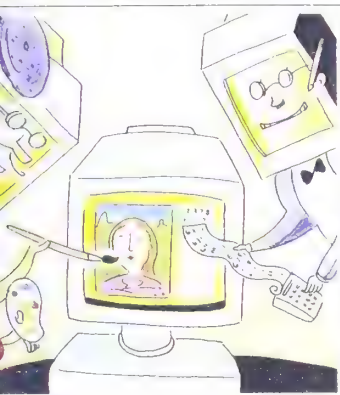
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BY PAUL M. ENG

WORTH 1,000 WORDS IN A COMPUTER, TOO



Lots of jobs done on computers would be enhanced if photo-quality images were available along with other data. A personnel system, for instance, might be more useful if it had employees' pictures as well as Social Security numbers and addresses. Such systems are possible, but usually only if imaging is built in from the start. Now, Image Data Corp.

has a package of hardware and software that will layer image-handling on top of existing applications on any network. Using a 386- or 486-based IBM PC clone, Insight can store and retrieve full-color images and distribute them to any PC on an office network. It's designed to tie into programs running on other computers, answering queries for specific images as well as receiving images from machines. Image transmission takes from 10 to 45 seconds, depending on the image's resolution and the speed of the network. An Insight setup that can serve up to 100 PCs is priced at \$46,000. The machines requesting images must run a separate \$625 program.

DESIGN A MOLECULE IN YOUR BASEMENT WORKSHOP

Before Autodesk Inc. came along, computer-aided design (CAD) was performed primarily on expensive minicomputers running costly software. But around 1983, the Sausalito (Calif.) company's AutoCAD package, priced under \$1,000, made it possible to design products such as tennis rackets on ordinary IBM-compatible PCs. Hundreds of thousands of engineers, industrial designers, and tinkerers bought the package. Now, AutoDesk hopes to repeat its success with a product called HyperChem, aimed at chemists and biophysicists. The package allows researchers to create and view chemical structures such as peptides and enzymes on a PC. That's important in developing products such as NutraSweet, which requires finding new ways to combine molecules. HyperChem, which works with Microsoft Corp.'s Windows graphics program, can save experimental data directly from a spreadsheet. The package, due out in March, will sell for \$3,000 to \$5,000 but will be sold to universities for less than \$1,000. Similar programs for workstations and minis do more but start at \$10,000.

FUJITSU TAKES ANOTHER CRACK AT INVADING CRAY'S TURF

There's a new line of supercomputers about to arrive—from Japan. Fujitsu America Inc., a subsidiary of Fujitsu Ltd., has decided to brave the current storm of controversy over U.S.-Japan trade and begin selling the parent company's VP2000 model directly to American engineering and scientific customers. These machines are so-called vector computers, similar in concept to those sold by market leader Cray Re-

search Inc. Fujitsu says the VP2000 sells for as much as \$17 million, depending on configuration, and offers 25% more oomph than comparably priced Cray models.

This marks Fujitsu's second attempt to crack the U.S. super market, the world's largest at about \$1.3 billion. Its first try, back in the mid-1980s, was through Amdahl Corp., a partially owned subsidiary of Fujitsu that builds IBM-compatible mainframes. But Amdahl sold not one super in the U.S. and only a few in Europe. Heading the new sales effort is Vice-President Thomas W. Miller, 57, a former executive of Control Data Corp. To help software companies and customers tailor programs to run on its machines, Fujitsu America has opened a software lab at its San Jose (Calif.) headquarters.

IS A SQUABBLE LOOMING OVER PHONE EXCHANGES?

With the boom in cellular phones and fax machines, phone companies are running out of numbers. There are only two virgin area codes left: 810 and 910. The shortage will disappear in 1995, when the industry creates 640 new area codes—by using smarter switches, thus removing the need for area codes to have 1 or 0 as their middle digit.

In the meantime, area codes are filling up. And that means the three-digit central-office codes that come after the area code—commonly known as exchanges—are getting scarce. Rival providers of local phone service that need blocks of numbers are questioning whether established local companies should have full discretion over who gets the precious codes. "It brings to mind the phrase about the fox guarding the henhouse," says Robert C. Atkinson, senior vice-president for regulatory and external affairs at Teleport Communications in New York, which competes with New York Telephone Co. and others. Bellcore, the research arm of the Baby Bells, is asking for written comments by Mar. 13 so it can report to the Federal Communications Commission by July 1.

CROWDED AIRWAVES: THE FCC MAY START EVICTION PROCEEDINGS

New wireless services, including mobile voice and data networks and radio stations that provide compact-disk-quality music, are possible—but only if they get a slice of the radio spectrum. To make room for them, the FCC wants to move current users: specifically, utilities, railroads, cellular and paging operators, and pipeline companies that use microwave networks for internal communications.

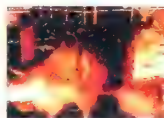


But, those 23,000 microwave licensees don't want to give up their space. They complain that the higher frequencies they're being asked to move to are inferior. For example, one band is used by backyard satellite dishes, whose owners would howl if their TV reception were wiped out by microwave signals. The entrenched tenants have picked up political support—including that of Presidential contender Senator Tom Harkin (D-Iowa). The FCC is accepting comments until Apr. 21 on how and whether to go ahead with the spectrum-clearing.

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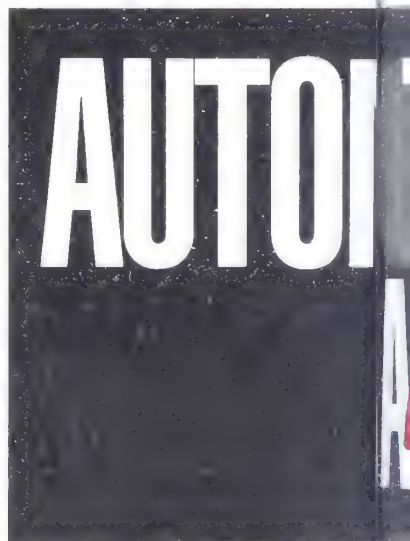


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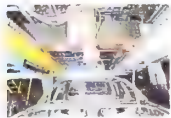


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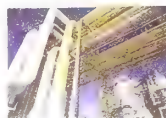
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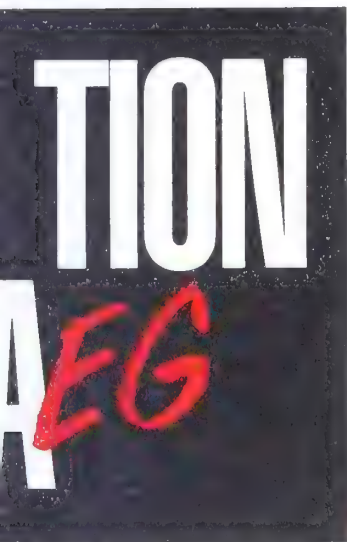
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THEY'RE 'AMIGIANS'— AND THEY'RE MAD AS HELL

Amiga users say Commodore neglects their beloved machine

It was not an amusing spectacle for the folks lunching at the posh Lyford Cay Club in Nassau, Bahamas, last November. A bunch of angry protestors had invaded the private country club to attend the annual shareholders' meeting of Commodore International Ltd., which is headquartered in West Chester, Pa., but incorporated in the Bahamas. Their demand: that Commodore Chairman Irving Gould—and his executives—wise up and do a better job promoting the computer of their dreams, Commodore's Amiga.

These Commodore shareholders and customers are the most vocal members of a group of Amiga owners who have developed a cultlike devotion to their computers. They point out—rightly—that when the first Amiga appeared in 1985, it embodied many firsts in color graphics, sound, and multitasking (running several programs at once). But since then, they complain, Commodore has done a poor job of marketing the machine they love in the U.S. Now, with Apple Computer Inc., IBM, and others adding Amiga-like capabilities to their machines, fewer and fewer computer buyers take the Amiga seriously.

Except for the cult of Amiga. Calling themselves "Amigians," they have taken it upon themselves to spread the gospel of Amiga. "For Amiga users, the computer almost becomes a religion," says Douglas Barney, editor-in-chief of the monthly *AmigaWorld*, which has a circulation of 101,000. "The computer is a major force in their lives."

SOFTWARE PINCH. The big fear among Amigians is that, after years of declining sales, the machine may simply disappear from the U.S. market. They place the blame squarely on Commodore, which has had rapid U.S. management turnover and has never positioned Amiga well in either home or business markets. With models priced from \$400 to \$5,000, Amiga fits both. In Europe,

Amiga is a popular game machine, especially in Britain. In Germany, the more powerful Amigas are the favored machines for serious programmers.

The numbers tell the story: Outside the U.S., Commodore earned \$48.2 million on sales of \$1.05 billion in fiscal 1991, ended June 30. In the U.S., Commodore lost \$24.7 million on sales of \$192.8 million. According to International



CAPED CRUSADER SCHWAB: "WE ARE KEEPERS OF THE FLAME"

Data Corp., Commodore's unit share of the U.S. personal-computer market dropped from 12.7% in 1986 to 2.1% in 1990.

That decline is what scares Amigians. Already, software companies are reluctant to write programs for Amiga, and few computer stores carry the machine. Commodore Marketing Director David J. Archambault says a new U.S. push will begin next month, and the company says there are absolutely no plans to withdraw from the U.S. market.

Amigians are taking no chances. "We will fight in the expos, we will fight in the press, we will fight on the bulletin boards," says Jeff A. Costantino, partner at VideoSign Inc. in Davie, Fla.,

which uses Amigas in video production. Costantino is a member of one of the hundreds of loosely knit user groups around the country that plot ways to make Amiga more popular. The groups organize letter-writing campaigns to computer and business publications that they believe have slighted Amiga. And they continuously bombard Commodore management with suggestions—which they say, management ignores.

Subtle, they're not. Amigians flood electronic bulletin boards with pro-Amiga messages and post their rallying cries: "Death to the [IBM] PC" and "Death to the Mac." One of the most colorful is Leo L. Schwab, a software developer based in Palo Alto, Calif. "He's the guy frequently seen at all the PC shows, wearing a cape and terrorizing IBM reps," says *AmigaWorld*'s Barney. Schwab's tactic is to corner employees of major computer and software companies and harangue them about the superior abilities of Amiga in multimedia—using computers to blend sound, graphics, and video. "We are keepers of the flame," says Schwab.

'A LITTLE EXTREME.' Many Amigians also have a financial interest in keeping the machine alive. The Amiga Developers Assn. is a hotbed of Amiga diehards. "Amiga users are a little extreme in their zealotry," says A. Hoppers, chief executive officer of Dr. T's Music Software Inc. in Boston and current president of the group.

Beyond zealots, Amiga has built a solid following in several markets. Over 3 million Amigas have been installed, and they're being used by medical technicians, graphic artists, musicians, and video production companies. Joe Conti, director, digital imaging, Apogee Magic in Van Nuys, Calif., used one to create animated sequences for the show *Unsolved Mysteries*. And author Arthur C. Clarke used the Amiga to study the Mandelbrot set, a mathematical formula that can create stunning visual effects for his latest novel *The Ghost from the Grand Banks*.

Such high-profile endorsements help. So do fanatical users willing to spend their time proselytizing among the unconverted. "You'll have to pry my Amiga from my cold dead fingers," says Schwab, who disparages all other PCs. Then again, if zealotry sold computers, Amiga would have been a hit long ago. *By Sunita Wadekar Bhargava in New York*

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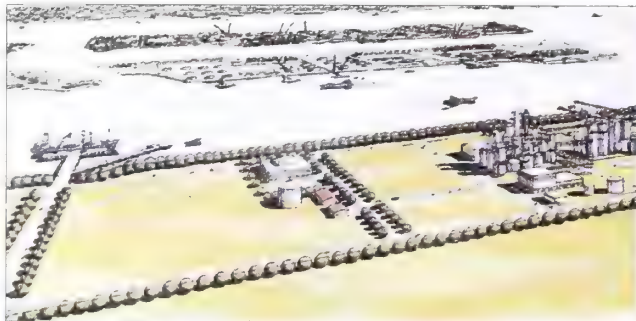
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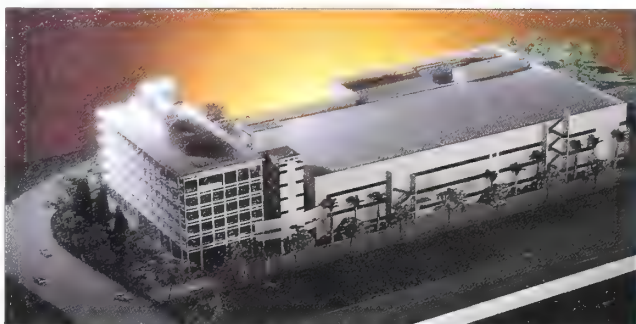
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IBM'S MAJOR TRIUMPH IN MINIS

The AS/400 is a hit in a market most companies gave up for dead

In the past few years, the minicomputer has shot to the top of the computer industry's endangered species list. The victim mainly of personal computers and engineering workstations. By the mid-1980s, the list of viable minicomputer makers had dropped to about a dozen, from more than 100 in the 1970s, and it continues to shrink. Even Digital Equipment Corp., long the dominant force in the market, has been alarmed.

Somehow, though, reports of the mini's demise never reached IBM. By trying conventional wisdom and industry trends, Big Blue has built a \$14 billion business in minicomputers, which is still growing and still earning hefty profits—with gross margins of about 56%. More important, at a time when IBM sorely needs new users, the AS/400 fills the bill nicely: Since the first AS/400 shipped in 1988, replacing two older mini lines, IBM has boosted its market share from 10% to 28%. Says John Thompson, general manager of the IBM Applications Business Systems Div., which designs, builds, and sells AS/400s: "We've DEC'd DEC."

MINING SUCCESS. Even better, the AS/400's success shows that in at least one other division, IBM can remake itself on its own. Located in Rochester, Minn., more than 1,000 miles from IBM headquarters in Armonk, N. Y., Thompson's division has rewritten many IBM procedures to respond quickly to market demands. Early on, for instance, it signed up hundreds of partners to program, test, and install AS/400s. Along the way, it even copped a Malcolm Baldrige National Quality Award. Chairman John F. Thompson hopes to clone that success as he turns Big Blue into a "federation" of independent companies.

Now the managers of those companies are getting to see their role model meet its severest test yet. The AS/400's easiest sales—upgrades from older IBM minis—are largely over. That and the recession crimped growth to about 4% to 6% last year, estimates Steve Josselyn, a market analyst at International Data Corp. That's still better than the 3% for

veiled just 10 months earlier and, for the dollar, deliver 30% more power. IBM executives, meanwhile, hint that IBM's own RISC chips will one day power AS/400s.

Meanwhile, IBM is modernizing the AS/400's software. To make it more user-friendly, Apple Computer Inc. and software supplier Object Technology International Inc. have been enlisted to get Macintosh and PS/2 desktops to work intimately with the system and display graphical "objects" to represent AS/400 data. Most AS/400s still use old-fashioned numbers-and-text terminals.

At the same time, IBM is making the AS/400 more mainframe-like. That should appeal to customers that are "downsizing"—moving work from costly old mainframes to cheaper machines. "IBM's trying to provide a path of least resistance" for those who are deter-

mined to stop investing in Big Blue's cash-cow mainframes, says Josselyn. This way, at least they stay with IBM.

FAST ACTION. That pragmatic attitude—free of headquarters dos and don'ts—has kept Rochester quite popular with customers. They appreciate that the division shares product plans with them—and acts promptly on their requests. "There's no development plan locked away for the next three years," says Michael A. Goff, vice-president for advanced technology at DST, a financial services subsidiary of Kansas City Southern Industries Inc. that uses 20 AS/400s. "They can respond to us in a very short time relative to other IBM divisions."

The AS/400 group is trying new marketing approaches and distribution channels, too. Big Blue is testing sales of smaller AS/400 models in computer superstores, including the Dallas-based BizMart Inc. chain. And it has persuaded Wang Laboratories Inc., which still makes its own VS minis, to sell AS/400s, too. Who knows? At this rate, Big Blue one day may be known as the AS/400 company, not the one that makes mainframes and PCs.

By John W. Verity in New York

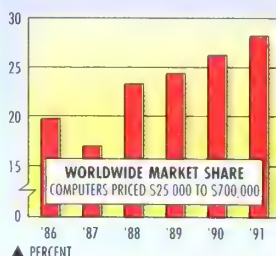


ROLE MODEL: IBM HOPES TO CLONE THE MINI DIVISION'S SUCCESS AT OTHER UNITS

all mini makers, but down from the 10% to 12% rate of the previous three years. At the same time, the AS/400, like all minis, has been feeling more heat from machines based on reduced instruction-set computing (RISC) technology. They're now attracting the type of business software—packages to run a medical group office, say—that has been the AS/400's biggest attractions. IBM says there are 9,000 such programs for its machine.

IBM met the RISC challenge in February with 13 new AS/400 models. They replace a line un-

IBM'S MIDRANGE GAIN



PUTTING THE PC INTO POLITICS

Partisans of 'teledemocracy' say it will energize the electorate

When Arthur S. Wilkinson obtained a copy of a six-page memo called "The Clinton Record," he knew exactly what to do with it. The coordinator of the Kerrey for President campaign in Bucks County, Pa., Wilkinson switched on his personal computer, wrote a summary of the memo and transmitted it to a special political bulletin board on the Prodigy information network. The memo, which he says was researched and written by Bush campaign operatives, is highly critical of Bill Clinton's tenure as governor of Arkansas. Within two days, Wilkinson received more than 60 electronic-mail messages from voters who wanted to read the whole thing. He faxed copies to most of them.

Welcome to the world of teledemocracy—using computer networks as a campaign medium and as a way to bring ordinary citizens into the political process. With 3 million U.S. households hooked up to on-line information services—up from 500,000 four years ago—this year's Presidential campaign may be the first to feel the influence of the new forum. It won't transform politics overnight, but advocates say it may be the beginning of a new type of participatory democracy that could energize the electorate and regain control from pundits and lobbyists.

Even the Presidential hopefuls themselves are going on-line. Former California Governor Jerry Brown is wired into the CompuServe network (table) where cam-

paign workers now field about 100 requests a day from voters who want to learn about Brown and his positions. Says campaign worker Russ Singer: "For most of them, this is the first time they have actually contacted a campaign and gotten answers."

Similarly, last December, former Irvine (Calif.) mayor Larry Agran, frustrated by the lack of media coverage of his campaign, held what is believed to be

the first live computer conference by Presidential candidate. CompuServe members were notified to log in at certain time to send in questions. A speedy typist transmitted Agran's answers back to the voters' PC screens.

An electronic Q&A is a first step. But computer network enthusiasts have something bigger in mind: an electronic town meeting spanning the nation. "But how do you conduct a meaningful discussion with thousands or millions of people?" asks Clem Bezold, executive director of the Institute for Alternative Futures, a think tank in Alexandria, Va. **BORING OR SEXY?** The two largest on-line services are trying to find out. CompuServe, a unit of H&R Block Inc. with 940,000 members, has set up a Campaign '92 Forum, where members post notes for all to read. Notes are grouped in subjects like "Can Boring be Sexy?," which has comments on the TV persona

of former Massachusetts Senator Paul E. Tsongas. Some say he evokes Elmer Fudd while others argue he's more telegenic than Richard Nixon.

Prodigy, a joint venture of IBM and Sears Roebuck & Co. with 1.5 million members, is more active in framing the debate on its bulletin boards. Prodigy editors choose topics in the news and rotate them every week. Recent ones include "State of the Union," "N.H. Primary," and "Taxing the Rich." Under each members create the subjects. Jennifer J. Mattingly, a Clinton campaign official and chairman of the Democratic Party in Williamson County, Tex., set up one called TexasVote. There, she explains why Clinton will "walk away with" the crucial Texas primary.

But political pros such as Mattingly, and Wilkinson, the Kerrey worker, concede that the average electronic debater is no Winston Churchill. "Any idiot can get on there," says Mattingly. That also makes polling by computer nets—or by interactive cable TV, for that



CAMPAIGNING IN CYBERSPACE

The following 1992 Presidential candidates are getting their message out to voters via on-line computer services

LARRY AGRAN (D) The former mayor of Irvine, Calif., a long-shot candidate, hosted a conference on the CompuServe network. Voters typed in questions on their PCs, and an assistant transmitted Agran's answers back

JERRY BROWN (D) Set up a forum on CompuServe. Voters can send electronic mail messages to campaign offices. Workers there reply to questions and send back electronic versions of position papers by the former California governor

PAT BUCHANAN (R) A volunteer in Michigan posts anti-Bush messages on Prodigy's political bulletin board. He's asking voters to press President Bush to agree to a live debate with the TV commentator

BILL CLINTON (D) A Democratic Party official in Texas set up an area of the Prodigy bulletin board called TexasVote. In it, she deflects criticism of the Arkansas governor and lists prominent people who have endorsed him

BOB KERREY (D) A campaign worker in Pennsylvania scans Prodigy's political bulletin board for messages from undecided voters. He sends them electronic messages urging support of the Nebraska senator

What's the best incentive to buy American?



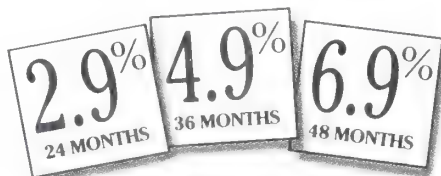
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Today, the results of Buick's commitment to world-class quality are being reported by the automotive press, and by Buick owners as well.

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*Examples: 24 monthly payments of \$42.94 per \$1,000 financed, 36 monthly payments of \$29.92 per \$1,000 and 48 monthly payments of \$23.89 per \$1,000. Down payment example is 20% down. (Your down payment may be more or less.) Dealer financial participation may affect consumer cost. You must take retail delivery from dealer stock. See your dealer for qualification details.

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Today, short-term rates in many foreign countries are higher than in the U.S. This chart compares three-month Eurodeposit CD rates as of 2/19/92. Rates are not intended to reflect the yield or investments of the Fund. Source: Reuters

matter—a questionable proposition. Prodigy does such surveys but warns that the results aren't a statistically valid sampling. Of some 26,500 respondents to a recent Prodigy poll, 51% said the U.S. is headed in the wrong direction. Yet 54% said they plan to vote for President Bush.

To help subscribers deal with issues Prodigy has added a data base called "Political Profile." It contains the legislative histories, fund-raising records, viewpoints, and biographies of each Presidential contender and member of Congress. Now, members have no excuse for getting their facts wrong. There's even a state-by-state rundown on how to register to vote, supplied by the League of Women Voters as part of its "Take Back the System" drive. "Voters feel the Presidential campaign no longer belongs to them," says Mary Ellen Barry, the league's national director. "This will increase their sense of participation and interest."

ON-SCREEN ADS. But not for everybody. "How many poor people have Prodigy or CompuServe?" asks Bezold. "The information revolution will increase the inequities of society." Indeed, CompuServe reports \$65,800 as the median household income of its members. Prodigy, which sells commercials to upscale advertisers, proclaims a median household income of \$73,200. These subscribers are also by and large the type of conservative suburbanites who, pundits say, swing Presidential elections. So Prodigy is soliciting the candidates themselves to place on-screen ads, which start at \$10,000.

Other critics charge that the new medium doesn't tolerate "politically incorrect" views. Andy Ditzhazy, a Michigan volunteer for TV commentator Pat Buchanan's campaign, complains that Prodigy has refused to post some of his notes, in particular one that discusses ways to overthrow the federal government. Prodigy says it reserves the right to reject notes that it deems obscene, offensive, or irrelevant to the topic at hand. And despite his experience, Ditzhazy has high hopes for teledemocracy. "When everyone has access to electronic mail and bulletin boards," he says, "political debate will be democratized."

What will that mean? Teledemocrats envision the day when all citizens have easy access to the information that their representatives use to make laws. "Someday," says Barry, "congressmen will be on the network." When that happens, proposed legislation could be posted on a bulletin board, where citizens could register their opinions. That might even get couch potatoes more involved in running the country.

By Evan I. Schwartz in New York

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the best in the world.



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MANY CHERNOBYLS JUST WAITING TO HAPPEN

A BUSINESS WEEK probe finds the former Soviet Union's vast nuclear industry teetering near disaster

Sergey Slesarenko, chief control-room engineer, didn't like what he saw. Scanning the main computer screen, blinking red on a silvery wall, he could tell that the first reactor of the Ignalina Nuclear Power Plant in eastern Lithuania was getting too hot. Giant pumps weren't flushing the core's 72-foot-long fuel rods with enough cooling water. In short order, some of them could be destroyed. On that night in mid-January, Slesarenko, 32, was staring into the face of another Chernobyl.

Slesarenko had to make a tough choice. Other sensors showed that everything was running normally. An emergency shutdown would cost the plant millions of rubles in downtime. It would also rob his family of his quarterly salary bonus, sorely needed because prices are rising very quickly.

Thinking fast, Slesarenko kept the reactor operating and ordered fresh software for the computer to clear up any glitches, a process that could take up to two hours. During that time, he risked having to run the reactor half-blinded. The gamble worked, but only for a little while. Before Slesarenko's shift was over, the problem happened again. And again. It wasn't until a week later that operators learned why: A disgruntled employee had inserted a virus into the computer software.

CRUMBLING PLANTS. Six years after the Chernobyl disaster contaminated an area the size of Delaware, the commercial nuclear-power industry in the former Soviet Union is in worse shape than ever. It may be the twin specters of smuggled missile warheads and renegade nuclear weapons designers that send shivers down the spines of officials from Washington to Tokyo. But the more immediate danger comes from outdated, unstable commercial reactors. A BUSINESS WEEK inspection of two plants and interviews with dozens of former Soviet officials shows how the vast nuclear industry has been left virtually unmanaged since the breakup of the country's political system.

Nuclear regulatory agencies are in

disarray, and safety inspections have become much less frequent. Because of a severe money crunch, none of the newly independent republics has the money to maintain proper levels of servicing. Equipment makers are being forced to shift to other product lines such as refinery gear and earth movers, prompting a shortage of spare parts. Nationalist tensions in Ukraine and Lithuania are keeping some Russian experts out of facilities that need help. Elsewhere, nuclear

operators and other experts are taking better-paying jobs in other industries.

Security is also a shambles. The nuclear stations have few security guards, who now make only cursory checks. That's a far cry from before, when the level of protection came straight out of a cold war spy thriller. Plants were surrounded by layers of electrified fences topped with barbed wire. Three separate teams of the vaunted KGB stood watch, aided by networks of plant informants.



...t they all went off the job
...er last summer's failed
...p d'état. Meanwhile, West-
... nuclear organizations,
...h as the International
...omic Energy Agency, have
...n slow to respond.

At the center of the drama
... 15 of the world's most
...pect reactors, similar to
...one that exploded and par-
...ly melted down at Chernobyl.

Called RBMKs, or High-
...wer Channel Reactors, the
...hite-moderated reactors
...duce 40% of all nuclear-
...erated electricity in the
...mer Soviet Union. Safety
...sn't the primary goal when
...y were designed in the
...0s at the height of the cold
...r, Soviet experts admit. The
...mlin wanted breeder reac-

...s that could provide large amounts of
...mercial power while producing plu-
...m for weapons at the same time.
...hen fate caught up with the design-
...at Chernobyl, emergency retrofits
...re ordered. But the measures failed



to fix such profound RBMK design flaws as the lack of containment domes to trap radiation after an accident or the reactors' instability when run at low power.

Compounding the danger is the location of many of the RBMKs. Some are sited on the outskirts of such major urban areas as St. Petersburg and Kiev. They can be a mere 50 miles, as the wind blows, from Western Europe. Hence, an accident would threaten some of Europe's largest population centers. Otto Lambsdorff, head of Germany's Free Democratic Party, says of the reactors, "They can explode any day."

The enormity of the problem is just beginning to dawn on Western Europeans, who are getting their first unre-

stricted visits to the reactors. "The fact that all Soviet reactors are unsafe is without doubt," says Heinz-Peter Butz, a spokesman at Germany's Society for Reactor Safety, a Cologne-based watchdog group. "But the RBMK reactors are the worst."

Not surprisingly, Western Europeans are beginning to talk about what can be done. Blue-chip power-engineering companies such as Siemens and Asea Brown Boveri are calling for the closing of RBMK plants and the formation of a \$7.5 billion fund from Western governments to refit other reactors throughout Russia and Eastern Europe.

But reactor catastrophes are not the only peril. Chronic leakage of radioactive isotopes from nuclear facilities also is a danger. Take the Leningrad Nuclear

Power Plant, which houses four 1,000-megawatt RBMK reactors in Sosnovy Bor, just 40 miles west of St. Petersburg. When German atomic energy experts visited the plant last year, they were stunned when their Geiger counters went berserk and they saw fire doors that couldn't close.

Russian environmentalists claim that levels of strontium 90, a radioactive isotope, in groundwater near Sosnovy Bor are 350 times above normal and that plutonium, which is ultratoxic, is present in small concentrations. At distances of a mere 1,300 feet from the plant, highly radioactive particles are 400 times the normal level. The leaks are caused by badly designed storage facilities for radioactive sewage, says Yulia Khairutdinova, head of a local Greenpeace chapter and a geneticist at a local ecology lab.

HOT STEAM. The shortage of spare parts is another problem. In the reactor room of the Sosnovy Bor plant, a dozen thin plumes of radioactive steam waft from under the cover of the reactor, situated several yards away. Questioned about them, Anatoly Eperin, the plant's director, answers casually: "That's a usual story these days: The seals we're getting now are pretty poor quality."

If the former Soviet republics were coping with purely technical problems, the challenge might be manageable. But the overlay of nationalist passions has given rise to the prospect of sabotage, as evidenced by the near accident at Ignalina. In that case, Lithuanian police arrested a senior programmer of Russian descent, charging him with infecting critical reactor software with a computer virus.

Although Lithuanian Criminal Police Investigator Kastutis Ratcheishis says he hasn't yet uncovered any evidence that the programmer was motivated by politics, the suspicion is strong. Snetch-

**DRESSED FOR
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GO BERSERK**

kus, the nearby town where most plant employees live, is an island of Russian technicians surrounded by resentful and nationalistic Lithuanians. For years, Russians enjoyed a higher standard of living because of their work. Now, they are being forced to obtain Lithuanian citizenship—or leave.

Just a year ago, when the KGB controlled security, it would have been extremely difficult to sabotage in any way a Soviet nuclear plant. Responsibility for security at Ignalina now lies with Lithuania, which is loath to accept it. Says Jurgis Vilemas, director of Lithuania's Institute for Physical & Engineering Problems of Energy Research, newly en-

for power generation, admits Sergei A. Adamchik, head of the committee's nuclear and radiation safety department.

The committee is already being weakened by defections of its regulators at the Russian nuclear stations because of low salaries. Some of the nuclear experts are snapping up jobs in newly formed private power companies. "We've already lost several young scientists to cooperatives, where they earn three or four times as much. How can we keep them?" asks Alexander Rimsky-Korsakov, grandson of the famous composer and deputy director of the Radium Institute in St. Petersburg, which was responsible for developing the nu-

Hüttel, chairman of Siemens' energy division, KWU, is even more adamant: "Because of their design flaws, it is economically not feasible to backfit RBMK reactors. Besides, the money provided by the EC is not enough by far." The European Community is proposing a \$100 million study program.

Nor will help be coming soon from the IAEA, which is supposed to promote the safe operation of nuclear plants worldwide. The agency is only now launching a study of RBMK reactors, which don't exist on a commercial scale anywhere outside the former Soviet Union. Says Morris Rosen, an IAEA expert: "It's a very delicate situation: We're trying to get the cooperation of new government agencies and the industry, and that's not easy."

WAITING FOR ACTION
A LACK OF SPARE PARTS, FAULTY DESIGNS, POLITICAL INFIGHTING, A BRAIN DRAIN: ALL PLAGUE THE NUCLEAR INDUSTRY IN THE FORMER SOVIET UNION

All remedies face political or technical impediments. The U.S. Nuclear Regulatory Commission, for example, has held more than 40 joint meetings with Soviet nuclear officials since 1988. But American restrictions on exporting high technology still keep sophisticated Western computer systems out of the hands of nuclear plant officials. Mothballing a nuclear reactor of the Chernobyl type is expensive and takes a long time. That's why two reactors at Chernobyl won't be shut down until 1993. Even if the for-

trusted with improving nuclear safety: "We have no money to beef up security at the plant. And to improve reactor safety, we need Western help badly."

No doubt. But Western nuclear safety experts trying to deal with old Soviet reactors can't figure out who's in charge. One problem is that all of the reactors, be they in Lithuania, Ukraine, or elsewhere, were designed, manufactured, and regulated in Russia. The institutes that train nuclear technicians and engineers are in Moscow and in Tomsk, Siberia. Non-Russian republics simply don't have the funding or the expertise to handle dangerous plants.

Even in Russia, regulation is up in the air. Reactor safety will be overseen by the new State Committee for the Supervision of Nuclear & Radiation Safety. But it isn't clear how sharp the committee's teeth are. It recognizes, for example, that the RBMK reactors are extremely dangerous and should be shut down, but it is powerless to issue that order. The reason: "We have no substitutes"

clear fuel cycle for reactors. Similar complaints come from reactor manufacturers, such as the Izhorosky Zavod, a huge industrial conglomerate on the outskirts of St. Petersburg.

NO QUICK FIX. That leaves the West as the only place where help can be found. Western experts argue that their governments and companies must get involved. "They should make an international effort through the European Community, or the International Atomic Energy Agency, because any kind of assistance is in our self-interest," says Murray Feshbach, a Soviet expert at Georgetown University.

But help won't be quick in coming, especially for the RBMKs. Western companies specializing in making equipment for nuclear power plants insist that fixing RBMKs is too expensive. Even if they could be fixed, the former Soviet republics can't afford to pay. "Why should we give away our equipment?" says Manfred Simon, a member of Asea Brown Boveri's managing board. Adolf

mer Soviet republics could be persuaded to shut the reactors down quickly, sending electricity from the West along the existing East European grid is impossible because the voltages of the Western and East European grids are not compatible.

It all shapes up as one of the most difficult challenges the West must face as it copes with the breakup of the Soviet Union. Western nuclear industry leaders and politicians may be unwilling to expose themselves to the necessary financial risk to address the reactor problems. But at the same time, they are taking still another risk.

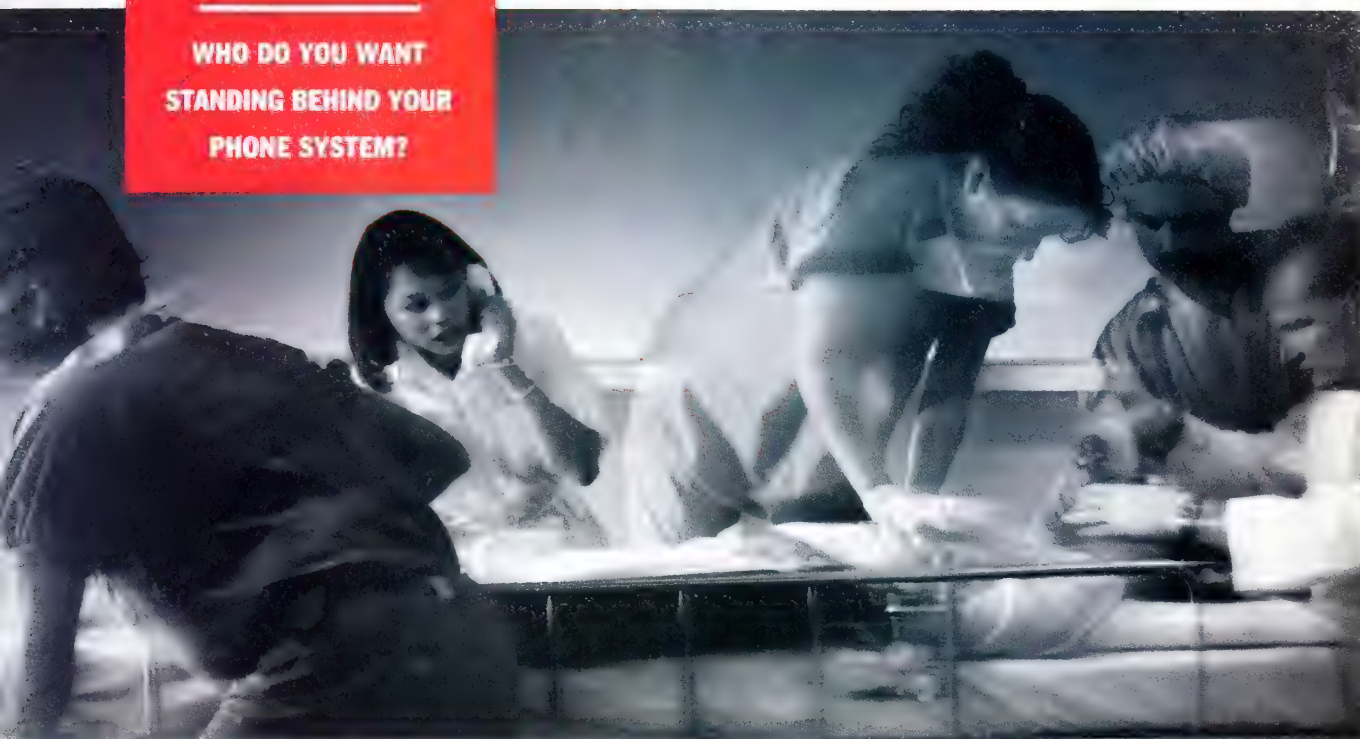
Should they do nothing, and a radiation catastrophe worse than Chernobyl occur, the nuclear-power industry worldwide will be in even greater turmoil. That means they are playing Russian roulette with nuclear power in more ways than one.

By Igor Reichlin at the Ignalina Power Station, with Deborah Stead in Moscow and Peter Galuszka in New York



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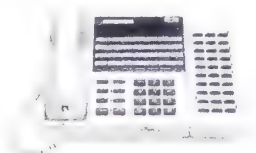
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CANCER DETECTIVES SPENSE WITH THE KNIFE



The hunt for cancer can be painful and time-consuming. Once doctors find a suspicious tissue mass, they take a sample and check for malignant cells under a microscope. Now, scientists at Los Alamos National Laboratory are developing a quicker, less invasive method.

Physicians would thread a hair-thin bundle of optical fibers into the body. By measuring the response to light sent through the fibers, scientists get a detailed cell "signature" within 30 seconds. That's because some light scatters as it hits cells, and the cells temporarily fluoresce. In all tissues studied so far, "there was a clear distinction between malignant and healthy cells," says Irving Bigio, leader of the Laser Sciences & Applications Group. In lab tests, he showed that the system can distinguish between cancerous and normal human prostate cells. Next, he plans to use the device to look for bladder cancer in actual patients.

SCIENCE SPENDING: HOW MUCH THIS ELECTION YEAR?

To boost U.S. competitiveness, the Bush Administration has proposed a sharp increase in the 1993 budget for basic research and for technologies such as high-performance computing, materials, and advanced manufacturing. The National Science Foundation, for example, is slated for an 18% hike. But the plan is in for a rough time on Capitol Hill. At a recent NSF budget hearing, Representative Bob Traxler (D-Ill.), chairman of the House subcommittee that funds the NSF, NASA, Housing & Urban Development, and the Veterans Administration, said that under current budget caps the NSF "will be lucky to get a 5% increase. That would have a 'devastating impact on those areas related to critical technologies,'" says an NSF official, who says the new programs in materials and manufacturing are largely contingent on the 18% boost. Things could get even worse. The President's budget leaves some expensive programs favored by members of Congress, such as new solid-fuel rocket motors for the space shuttle. Adding those back in would leave even less money for science and technology programs. NSF officials hope that election-year politics will put the spotlight on U.S. competitiveness research and development—and prompt Congress to lift spending caps and pump more money into research.

MORNING COOKS UP CLEANER CATALYTIC CONVERTERS

Reducing emissions from automobiles will help everybody breathe a little easier. A prime target: cold engines. It takes about two minutes for a car's catalytic converter to heat up and begin working. The untreated exhaust that is emitted in the meantime is a major contributor to smog. Now, Corning

Inc. in Corning, N.Y., has come up with a way to make catalytic converters much more effective.

In Corning's prototype, exhaust goes into an electrically heated catalyst that starts working within 10 seconds after the vehicle's ignition is activated. Then the exhaust passes through a conventional honeycomb ceramic coated with platinum and rhodium.

Corning says its dual-catalyst system already meets or beats most of California's tough emissions standards that will be phased in beginning in 1994. Still, challenges remain: The converter's need for extra power has to be reduced. And the system—which would add an undetermined amount to a new car's sticker price—must be engineered to survive a minimum of 10 years or 100,000 miles on the road.

THE ROYAL FOOD TASTER OF THE '90s?

Testing food for contamination often requires skilled lab technicians and can take from two to five days. Researchers at Hitachi Electric Engineering in Tokyo think they have a better solution. Building on studies at Japan's Institute for Physical & Chemical Research, the company has developed a system that tests food or drug samples for bacteria.

The system illuminates a sample with a xenon flash lamp and, using optical integrated circuits, converts the reflected fluorescence from the bacteria to electrical signals. A personal computer then contrasts the signals against a data base to reveal how many live bacteria are present in the sample.

The biggest selling point is speed. The entire analysis, from the initial bacterial culture to the final computer readout, takes just over eight hours. Since it's all automatic, the system will save thousands of dollars in labor costs, the biggest expense in today's approaches. Hitachi expects to have a product on the market within 12 months.

THIS SHOULD SHED SOME LIGHT ON POLLUTION'S ILL EFFECTS

Ever stricter clean-air laws mean utilities and state and local governments must carefully track air emissions for Environmental Protection Agency review. Current systems measure only a few contaminants. The EPA is testing a spectroscopy-based system, OPSIS, that charts 20 chemicals at once.

Here's how: As a narrow light beam travels through the air, each gas absorbs light in a specific wavelength. The telltale wavelength for sulfur dioxide, for example, differs from that for ozone. With OPSIS, a spectrometer automatically determines the concentrations of pollutants by studying how much light is absorbed at each wavelength.

In addition, the beam can scan either a small area to measure smokestack emissions or a wider swath of up to 1.5 miles to chart regional air quality. Asea Brown Boveri Inc., which is marketing OPSIS to U.S. utilities, says the system will save up to 85% on testing and operating costs. The EPA is considering using OPSIS as a basis for new regulations that would require measuring more pollutants over a broader area.





NOWHERE TO GO: CHENEY WANTS TO MOTHBALL THE M-1

A LIFE RAFT FOR ARMS MAKERS

Can the Defense Dept. keep crucial military contractors afloat?

When troubled Avtex Fibers Inc. shut down its rayon plant in Front Royal, Va., in late 1988, the shock waves immediately spread east to the Pentagon. The Defense Dept. and NASA quickly pumped \$40 million into the company, which was the nation's sole maker of continuous-filament rayon yarn for the nose cones and booster rockets of strategic missiles and space vehicles. That kept Avtex producing long enough to amass a yarn stockpile and gave the Pentagon time to line up another supplier.

Now, it seems that Avtex was an early warning. Cuts in military procurement budgets are threatening many defense companies. So many, in fact, that Congress and the Bush Administration are fretting that the nation won't be able to gear up quickly in a crisis. The defense industrial base "will not be able to respond in a timely fashion if it is allowed to wither away," said Defense Secretary Richard B.

Cheney in a Feb. 25 report to the President and Congress.

To avoid that, the Administration is pulling together a life-support system. Cheney wants to keep up funding for defense research and development—\$37 billion this year. But he'll take new weapons only to the prototype stage, then shelve them until they're needed. Meanwhile, the Pentagon will push increased arms sales to friendly governments to stretch out current production and keep factories alive. It is also shoring up industry finances by phasing out the fixed-price contracts that resulted in big losses at many companies. And it's urging defense contractors to adopt flexible manufacturing systems so they can switch from defense to commercial production—and back—in a hurry.

That won't be enough, critics contend. "If we follow [Cheney's] plan, we will be out of business in several defense industries," argues Representative Les Aspin

(D-Wis.), chairman of the powerful House Armed Service Committee. Others, including outgoing Hughes Aircraft Co. Chairman Malcolm R. Currie, argue for a full bore industrial policy. Otherwise, they fear the industry will be hollowed out, as it was after the Vietnam War. In 1974, Congress tried to double U.S. tank production to replace tanks given to Israel. There was plenty of excess tank capacity around. But only one foundry was still making turret and hull castings, so it took more than two years to get output cranked up.

SHRINKING FLEET. The defense base is already getting thin again. In 1980, there were 22 major U.S. shipyards. Now, there are just five, largely because U.S. yards can't win commercial orders against overseas builders. The Navy plans to halve its orders, to five or six ships a year, which may be enough to sustain only one or two major yards.

Even more alarming is the shakeout among arms subcontractors. A study by the Center for Strategic & International Studies, a Washington think tank, shows that the number of defense suppliers plummeted even as military spending boomed during the '80s. Their ranks thinned from 118,489 in 1982 to 38,007 in 1987, partly because arcane Pentagon accounting rules drove many out. Today there are just one or two domestic makers of such key items as airborne radars, opt-

MILITARY MANUFACTURING: THE NEW BATTLE PLAN

Here's how the Pentagon hopes to provide enough weapons-making capacity despite huge defense budget cuts

KEEP R&D ROBUST Maintain research spending but only make prototypes of new weapons, rather than do costly full-scale production

STANDARDIZATION Reduce reliance on exotic military specifications and buy more commercially available components

FLEXIBLE MANUFACTURING Encourage defense companies to adopt civilian-style production techniques, so that vast segments of industry

can quickly switch to making military goods if war breaks out

ENCOURAGE FOREIGN ARMS SALES Spread the cost of weapons—and keep the surviving defense plants busy—by boosting sales to friendly nations overseas

NEW FUNDING TECHNIQUES Increase reimbursements for research and move away from inflexible fixed-price contracts

DATA: DEFENSE DEPT., BW



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To help slow this trend, Aspin proposes to upgrade existing weapons and keep making small numbers of them. For instance, the Administration plans to mothball the nation's only tank line, in Lima, Ohio, until a new tank is produced after 2000. To keep component makers going, Aspin would modernize more M-1 tanks. He also wants the Pentagon to keep buying F-16 fighters from General Dynamics Corp. But such ideas are costly. The Aspin approach "would bankrupt" the nation, argues Norman R. Augustine, chairman of Martin Marietta Corp. "I'd rather spend that money on research to look for breakthroughs—stealth, night vision, and other things that make a huge difference."

SHORT SHELF LIFE. Cheney is headed in that direction, but his plan has pitfalls, too. Merely making prototypes may let too many plants close, dispersing work forces and key skills. "When the time comes to unmothball the tank plant, there'll be no one to run it," warns Loren B. Thompson, deputy director for national security studies at Georgetown University. Beyond that, technology moves so fast, says Roger I. Ramseier, president of GenCorp's Aerojet aerospace division, that "I can't imagine a product that could be put on a shelf and then just produced at a later date."

Quickly shifting from military to civilian production and back again could be dicey as well. Some small defense suppliers are converting successfully (box). But the efforts of big arms makers to diversify have been "relatively dismal," says Peter B. Oram, president of Grumman Corp.'s aircraft group. U.S. companies that do both military and civilian work usually keep the two separate to avoid running afoul of Pentagon security and auditing rules.

Switching back and forth would be easier if the Pentagon used simplified, civilian-style accounting and production systems. Not only are its specs exotic, but Defense Dept. planners often dictate in excruciating detail how weapons are made. "Adopting commercial standards would encourage flexible manufacturing, which provides the opportunity for integrating civilian and military production," says Jacques S. Gansler, senior vice-president of Analytic Sciences Corp., a Roslyn (Va.) research company. It would cut costs, too. Murray L. Weidenbaum, former top economic adviser to President Reagan, estimates that paperwork accounts for up to 30% of defense-procurement expenses.

Trouble is, the Pentagon has made little progress in simplifying its rules. And time is short: Arms procurement is expected to drop to \$50 billion in the mid-1990s from the 1985 peak of \$126 billion.

In fact, Cheney may already be inter-

vening more than he intended. In early February, he conceded that Defense is funding a new \$4.5 billion aircraft carrier at least partly to keep the Newport News (Va.) shipyard and its suppliers financially sound. And the Pentagon says it might take measures to bolster McDonnell Douglas Corp. if the company's financial troubles worsen.

Defense planners are also rushing ahead with their first studies of how much

manufacturing and technology may be lost in the current cuts. If necessary, says Deputy Defense Secretary Donald J. Atwood Jr., the Pentagon "will put effort into sustaining" critical technologies. Given how fast the industry is shrinking, the alternative could be a lot more Avtex-style bailouts.

By Amy Borrus in Washington, with Thane Peterson in New York and James E. Ellis in Chicago

A THRIVING BUSINESS IN SWORDS AND PLOWSHARES

By day, they're defense contractors. But on nights and weekends, engineers at Sonalysts Inc. hole up in their labs to concoct new businesses. The results: Academy Award-winning sound effects for the film *The Hunt for Red October*, computerized TV animation, and a diving business that does underwater repairs on nuclear reactors. They've even come up with a "fish startler" that uses sonar technology to scare fish away from power-plant cooling-system intakes.

What's behind all this creativity? Defense cuts—and a little desperation. The Navy isn't expected to cut back on the research-and-development work that Sonalysts does. But this worker-owned company, founded by ex-Navy officers in Waterford, Conn., isn't waiting to be torpedoed. Unlike most of its bigger rivals, Sonalysts is a master at creating commercial businesses from Pentagon know-how. It's so good at it that the state's Economic Development Dept. has hired Sonalysts to design a program to help other area defense companies survive.

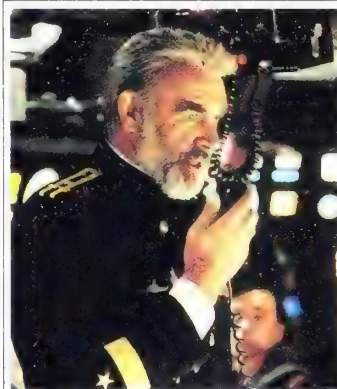
RIPPLE EFFECT. There's plenty of need for such aid. Some 4,000 workers at nearby Electric Boat Div. of General Dynamics Corp. are expected to lose their jobs because of cuts in the Seawolf submarine program (BW—Jan. 27). The ripple effect from Seawolf could devastate southeastern Connecticut, where 72% of some 145,000 jobs are defense-related.

For people in such a fix, Sonalysts at least offers hope. Last year, revenues were up 20%, to \$32 million, with non-

defense businesses contributing 40% of the total—and much of the growth. While other companies are laying off workers, employment at Sonalysts was up 14% last year, to 427. Even so, President John C. Markowicz and five other

executives have taken 20% pay cuts to help keep costs low.

The company keeps sales growing by leveraging one business into another. It branched out from training videos for submarine crews into sound effects and animated promos for televised Boston Bruins and Red Sox games. Building on the fish startler, other workers developed a "mus-sel buster" that uses



RED OCTOBER: SOUND EFFECTS ARE AMONG SONALYSTS' WARES

sound waves to keep zebra mussels from clogging water pipes.

Markowicz says one key to finding successful commercial products is to "be resilient and accept failure." Sonalysts has had its share of duds: A video game never worked during sales presentations, a now-defunct second-mortgage subsidiary stumbled, and cases of the only book put out by its failed publishing arm collect dust in a corner.

The company's engineers have shrugged all this off. And why not? Sonalysts was recently hired to do animation for sports network ESPN. Markowicz hopes the small project will lead to a major contract. Sonalysts is also considering building its own film studio, and it plans to market its recording studio to musicians. Designers also want to revive the failed video game for interactive videodisks. At Sonalysts, even old ideas may be a good offense against defense cuts.

By Lisa Driscoll in Waterford, Conn.

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WHEN THE TV LIGHTS START TO DIM

Montreal may have some solutions to declining TV revenues

Inside the Montreal Forum, the anticipation was as brittle as mirror ice on a frozen pond. Montreal Canadiens fans were worried because their first-place Habs had dropped three straight. Then, just over four minutes into the Feb. 10 match against the red-hot Vancouver Canucks, Canadien Gilbert Dionne slapped the puck into the net and the standing-room crowd of 16,838 erupted. That set the tone for an 8-3 blowout of the Canucks and rekindled hopes that the Canadiens may win the Stanley Cup once again—adding to the record 23 they have captured since 1916.

With such a powerful team and such rabid fans, running the Canadiens may seem as smooth a job as one of Dionne's slapshots. The team is solidly profitable. Last year, it was the key reason its owner, the Sports & Entertainment Group of Molson Cos., Canada's largest brewer, reported \$7.4 million in operating profits on sales of \$52 million. But Ronald L. Corey, the pin-striped president of the Canadiens for the past decade, complains that "it is getting tougher and tougher" to prosper in hockey. Salaries have soared even as the National Hockey League has become the first professional sport forced to take a cut in its U.S. national TV contract.

Corey isn't wringing his hands, though: He's taking steps to insulate the team from the vagaries of TV money by increasing revenues generated at home. And it won't be surprising if Corey's experiment is closely watched by executives in other sports. The years of steady growth in the national TV contracts of Major League Baseball and the National Football League may soon end.

Hockey has already taken its lumps. The league is receiving a mere \$5.5 million from cable network SportsChannel America this year, compared with \$17 million yearly under its previous three-season deal. True, the NHL does better in Canada, where its contract generates about \$25 million a year. And the Canadiens, like other teams, pull in substantial revenues from local broadcasts.

But TV is no longer Old Reliable. So



A CANADIENS-BUFFALO SABRES MATCH

THE CANADIENS' FORMULA FOR PROSPERITY

- **Own your own arena**—and stuff it with luxury boxes
- **Build concession sales** by making food outlets eater-friendly
- **Stay close to the fans** by opening practices to the public—and don't charge them for it
- **Don't disappear in the off-season**—keep your players in the public eye over the summer
- **Don't let the stars go**—staff your front office with retired greats and Hall-of-Famers

the Habs are creating other mainstay. The centerpiece of their strategy is plan to replace the Forum, which they have occupied for more than 60 years with the largest arena in the NHL. They get the needed government approvals, the Canadiens plan to break ground on the \$128 million new Forum in 1995 and move in for the 1995-96 season.

BIG PAYOFF. The logic for the move is compelling. Ticket sales already make up almost 65% of the revenues of NHL teams, with 10% more coming from other arena sources such as concessions. Only about 25% comes from TV. A new arena may be the only way a team can meet player costs, which soared 34% this season, to an average of about \$300,000 a player, and still make money.

The new, privately financed Forum promises a big payoff. Its 33% increase in capacity, to 21,500 seats, should easily add more than \$5 million to annual gate receipts of about \$15 million. And while the Forum's 61 cramped luxury boxes bring in about \$1.3 million a year, the 126 boxes in the new Forum will net 10 times that. Despite Canada's fierce recession, the Canadiens managed to prelease all the boxes, at up to \$106,000 a season, in only two months. "It will be tremendously successful building, and maybe one of the most successful in a decade of sports," predicts Ron Turner, senior vice-president at Ellerbe Becket Inc., the leading U.S. architect of new arenas. (Ellerbe is not working on the Forum.)

Of course, all those rosy projections depend on fan support. That's why the Canadiens throw free practices, field a traveling softball team during the summer, and keep eight Hall of Famers on the payroll.

Still, Corey worries that there's no way "to guarantee winning year after year." So Molson has formed a joint venture with Canadian Pacific Ltd. that will one day build two huge office towers next to the new Forum. Corey calls it "a long-term guarantee." In the uncertain business of sports, even the depressed office market can look like a sure thing.

By William C. Symonds in Montreal

SUSAN CROWE, EX-PERSONNEL DIRECTOR



AFTER 17 YEARS
OF 60-PLUS-HOUR
WEEKS, SHE QUIT.

to buy, one that would
embrace her love for
sailing. And she found it

For Susan Crowe of Chicago, the corporate lifestyle had grown stale. The time had come to work for herself. And she could afford to. Six years earlier she sat down with her Shearson Lehman Brothers Financial Consultant and came away with a diversified investment portfolio. Which included putting some assets into the hands of a top money manager. She began scouting for a company

in the seaside hamlet of Stockton Springs, Maine. Where, in January 1992, Sue and her husband, Robert, became the proprietors of BlueJacket ShipCrafters, makers of museum-quality model shipbuilding kits. Is there someplace you'd rather be? Maybe we can help you get there, too.

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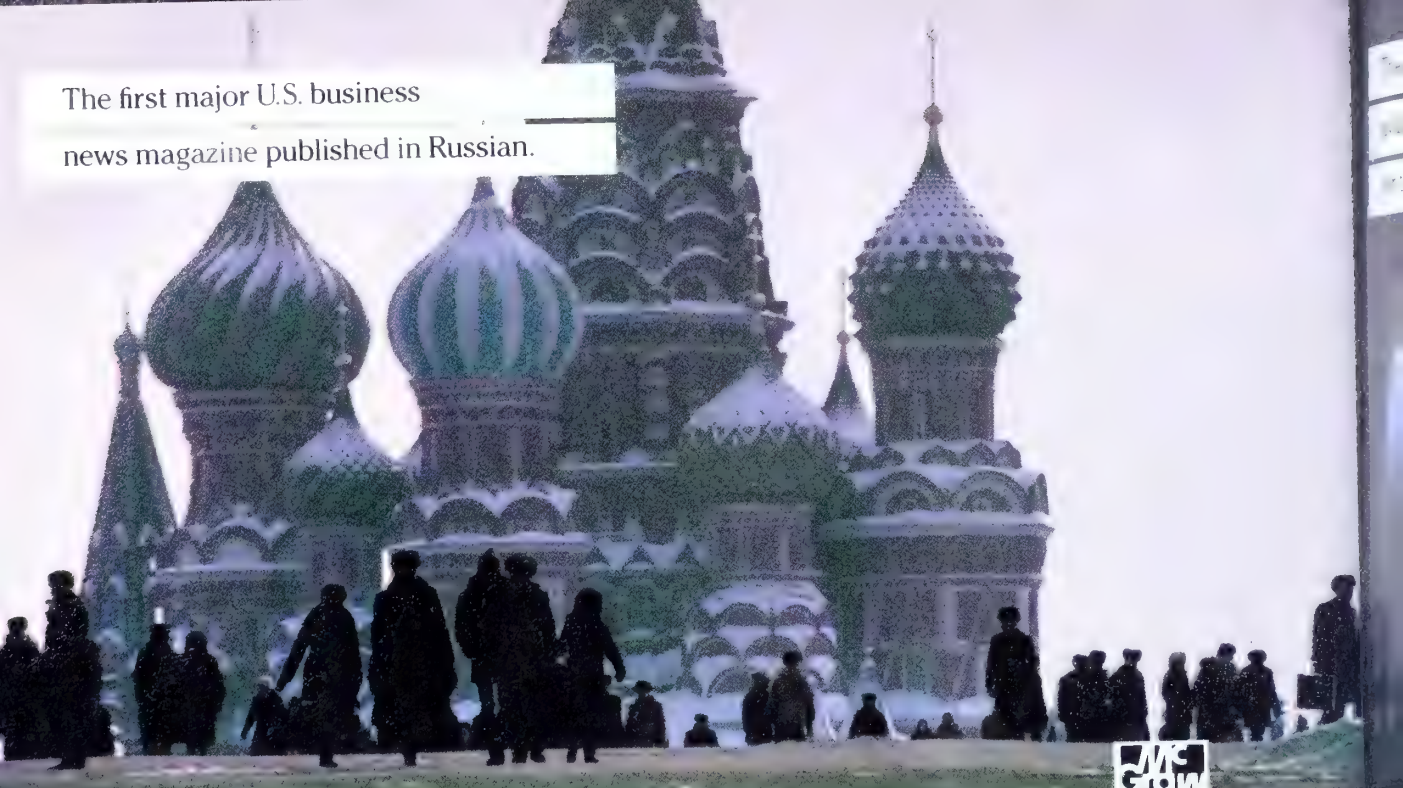
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PROSTATE CANCER: HOW TO THWART A KILLER

Rowan Crawford wasn't visibly shaken eight years ago when he heard his urologist quietly say: "You have prostate cancer." Now 69 and living an active retiree's life in Florida, the former director of corporate communications for Armco recalls how he listened "with a strange feeling, like I was outside my body watching myself" as the doctor discussed treatment options.

As the population ages, more men will be facing the same diagnosis as Crawford. Approximately one of every 11 men in the U. S. will develop prostate cancer, says the American Cancer Society. More than 80% will be past 60, as in the case of 71-year-old Supreme Court Justice John Paul Stevens, who began undergoing treatment in February, and Time Warner Chairman Steven Ross, 64, whose illness may have precipitated a recent realignment in his company's executive ranks. But with 132,000 new cases expected this year—10,000 more than in 1990—younger men are also at risk. Figures from the National Cancer Institute show 32 cases annually per 100,000 men aged 50 to 54, and nearly 100 for ages 55 to 59.

But the news isn't all bad, despite projections that prostate cancer will kill 34,000 men in 1992, ranking it second to lung cancer in deadliness. If the disease is discovered early, before it can spread, treatment is so effective that nearly 90% of all patients live at least five more years. And for all cases combined, the survival rate has increased to nearly 75% from 50% three decades ago. "With those kinds of results, today's high mortality rate is just unaccept-



able," says Curtis Mettlin, who heads an ACS committee on ways to increase early detection of the disease.

Unlike some cancers that grow deep within the body, trouble in the prostate can often be felt by a physician con-

ducting a rectal examination. The gland, which produces the fluid that carries sperm, is ordinarily the size of a walnut. But it becomes enlarged as a man reaches 50 or so. Then, it often presses on the bladder, causing him to feel the need to urinate frequently. Or, it may make urination difficult or painful by compressing the urethra, the tube that carries urine from the bladder.

If either symptom is prolonged, that should be enough

to make you consult a doctor. An enlarged prostate in itself can be life-threatening about one-quarter of all cases as the swollen gland causes infections or severe urinary problems. In that case, surgery to remove all or part of the prostate is called for, and the operation is so common that some 364,000 men underwent a prostatectomy in 1990. In another form of treatment, a balloon is inserted through the penis and then inflated to unblock the urethra. There are also several drugs that affect blood pressure which can relieve symptoms. Merck is awaiting government approval on a new drug, Proscar, that tests indicate actually causes the gland to shrink. Drugs, though, can have long-term side effects that aren't yet known, and they aren't likely to help when cancer is present.

NEW TESTS. Of the various treatments that come into play when the diagnosis is cancer, the most common is to remove the gland surgically. The operation was once dreaded, since damage to nerves and muscles could cause impotence and incontinence. But now microsurgery techniques have reduced the chance of such unpleasant consequences.

Another treatment involves killing the cancer cells with radiation from a device called a linear accelerator. Crawford notes that his urologist, Dr. Louis Gaker of Middletown, Ohio, successfully used an alternative method for his case in 1984: implanting tiny radioactive pellets in the gland.

In cases where the cancer has spread, treatment can be severe. One risky alternative to heavy doses of radiation is chemotherapy with expensive

**An enlarged prostate
in itself can be
life-threatening**

entially dangerous
rs. Another is to rid
body of testosterone,
hormone believed to
er growth of the can-
cells. This can be
by administering es-
en, which may cause
d clots or cardiovas-
r trouble, or by cas-
on, which surgeons call
nectomy. Even with such
tic measures, the median
ival rate is only one to
e years.

Unfortunately, a number of
tests have been devel-
in the past few years to
your physician detect
ate cancer before it has
ted to spread. Among
are a blood test for PSA,
rostate specific antigen—

WARNING SIGNS OF PROSTATE CANCER

- ▶ Weak or interrupted urine flow
- ▶ An urge to urinate frequently, especially at night
- ▶ Blood in the urine
- ▶ Painful or burning urination; painful ejaculation
- ▶ Persistent pain in the back, hips, or pelvis

DATA: NATIONAL CANCER INSTITUTE

a chemical that appears in
higher levels when cancer is
present. If you are scheduled
for an annual physical (and
any man over 40 should have
one that includes a rectal
exam), the blood test should
precede it. Dr. E. David Craw-
ford, a prostate-cancer spe-
cialist at the University of
Colorado Health Sciences
Center, says the PSA test is
twice as accurate as a rectal

exam, and a blood test warn-
ing can lead the examining
physician to be more thor-
ough.

OUTPATIENT BIOPSY. If your
doctor feels a firm spot or
other suspicious area on the
gland, the next step is usually
a biopsy. This meant an over-
night stay in a hospital a few
years ago, but today the pro-
cedure normally is done in the
urologist's office in minutes.

While the patient lies
with his feet elevated,
the doctor uses a gunlike
spring-needle device to
take a millimeter-size tis-
sue sample from the
prostate. It's done so rap-
idly there's no need for
an anesthetic.

For patients wary of
enduring even the momentary
sting of a biopsy needle, some
urologists use an ultrasound
machine to produce an image
of the prostate gland on a TV
monitor. But because the de-
vice can reveal extremely tiny
irregularities, which might or
might not be cancerous, reli-
ance on it alone can lead to
overtreatment. Many doctors
will suggest a biopsy as a fol-
low-up anyway. *Don Dunn*

No sector of the stock
market has been as
hot—or befuddling—
biotechnology companies.
Investors in a wide swath of
tech issues have seen their
ings double in price over
past year because of ad-
vances in drug-delivery sys-
tems, DNA technology, carbo-
hydrate chemistry—in other
words, stuff that leaves most
scratching their heads in
bolderment.

If you plan to buy biotech
stocks—or short-sell them, for
that matter—a good place to
look for worthy equi-
ties is in the pages of biotech-
ny newsletters. But find-
ing a sophisticated, clearly
written one is about as easy
as gene-mapping. There are a
lot of such publications, but
many are too technical or nar-
rowly focused on, say, new-
drug approvals at the Food &
Drug Administration.

Professional journals, such
as the *New England Journal
of Medicine*, are only for die-
hard biotech mavens. At the
other end are newsletters
that “just rehash company
press releases and don't pro-
vide any analysis,” declares
Michael Scherer, a biotechnol-
ogy analyst at Dain Bosworth

ID-SPOTTER. Fortunately,
investors can take a broader per-
spective (table). The best,
in our view, is the *Medical Technol-
ogy Stock Letter* and *BioVen-*

Investing

MAPPING THE MYSTERIES OF BIOTECH STOCKS

venture View, spot trends and
hot products before they're
reported in the media. *Medi-
cal Technology*, for example,
devoted one recent issue to a
discussion of a hot trend in
pharmaceuticals, “rational
drug design,” and followed it
with a list of companies, in-

cluding a few privately held
ones, that are developing the
technology.

BioVenture's February is-
sue led off with a caustic
analysis of the Hambrecht &
Quist Life Sciences Confer-
ence, an annual biotech dog-
and-pony show characterized

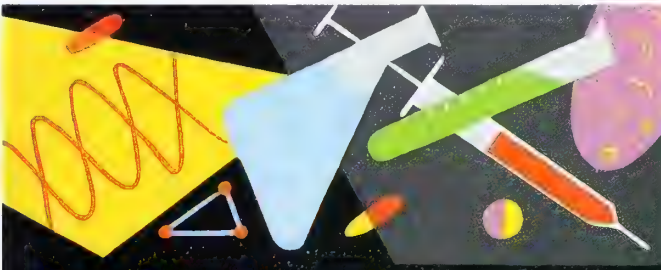
by an “onslaught of indeci-
pherable new technologies,”
reported Cynthia Robbins-
Roth, the editor-in-chief.

A three-month-old entry,
*Sturza's Medical Investment
Letter*, takes a different ap-
proach by focusing on three
or four specific companies per
issue. The January issue in-
cluded a buy recommendation
for Barr Laboratories, a ge-
neric drugmaker that Sturza
described as “very underval-
ued,” and a sell recommenda-
tion for pharmaceutical giant
Upjohn. “Anything but ‘up,’”
sniffed Sturza.

LONG ON HYPE. Another of-
ten-critical source of biotech
analysis is a more general
publication, *California Tech-
nology Stock Letter* (415 726-
8495). Editor Michael Murphy
also writes a newsletter on
short-sale candidates called
Overpriced Stock Service.

A skeptical viewpoint is es-
sential because biotech com-
panies are often startups that
are long on hype but short on
sales or earnings. “It's very
hard to buy stocks using a
newsletter as a tip sheet,”
says Jeffrey Casdin, an Op-
penheimer & Co. biotech an-
alyst and former newsletter
editor. “They're no substitute
for first-hand research.”

Biotech newsletters are like
a roadmap through a mine-
field—they point the way, but
you still have to watch your
step. *Gary Weiss*



A BIOTECH NEWSLETTER SAMPLER

Newsletter	Price*	Selling point
BIOTECHNOLOGY NEWSWATCH 212 512-6410	\$737	Includes abstracts of new European patents
BIOVENTURE VIEW 415 574-7128	499	Sophisticated analysis of biotech innovations
BIOWORLD TODAY 415 696-6555	599	Daily fax; industry coverage
MEDICAL TECHNOLOGY STOCK LETTER 510 843-1857	260	Strong stock market perspective
STURZA'S MEDICAL INVESTMENT LETTER 212 873-7200	250	Detailed company profiles

* Annual subscription rate DATA: BW

Travel

SALVAGING THE FARE WHEN A TRIP IS NO GO

Six days after Tom Olson of Pittsburgh shelled out thousands of dollars for a cruise to Alaska, the Exxon Valdez spilled millions of barrels of oil into Prince William Sound. Such an event could turn a dream vacation into a nightmare, but Olson wasn't worried: He had spent an extra \$100 for trip-cancellation insurance. "When you've invested that much money and planning," says Olson, who took the cruise anyway, "you want the confidence of being able to cancel."

Travel insurance policies can protect holders of nonrefundable travel against illness and other emergencies. But determining whether the protection is worth the premium requires you to know what coverage you have and what the policies really cover.

WHAT TO KNOW BEFORE BUYING TRIP INSURANCE

DO YOU HAVE A PRE-EXISTING MEDICAL CONDITION?

WHAT DOES YOUR INSURANCE COVER?

DOES YOUR AIRLINE ALLOW FREE CANCELLATIONS DUE TO ILLNESS?



That's hard, given the mountain of options hawked by travel agents, credit-card companies, or direct mail. Baggage insurance, for example, covers lost luggage. Trip-delay policies pay up if flights are late or you miss a cruise connection. Medical-evacuation insurance can whisk you home for treatment.

But agents say travelers are most interested in cancellation insurance—especially for expensive foreign trips,

prepaid tours, or cruises. It can be invaluable if you're forced to cancel for a covered reason—a natural disaster, in Olson's case. But, advises Lee Granger of Carlson Travel Network, "it's important to read the fine print."

CHRONIC COMPLAINT. To be valid grounds for a cancellation claim, for example, a disaster at home must be major—such as a fire or flood. Or if you hold a ticket on a bankrupt carrier, most poli-

cies won't reimburse you for lost airfare if the airline stops flying before or during your trip. "And remember, you're not covered if you simply change your mind," your boss says you can't go," warns Beth Godlin, president of the travel vision at Accel America, a travel-surance firm.

Medical problems are trickier. Travel policies usually don't cover cancellations due to long-term illness or preexisting

conditions treated within days of buying the policy.

Cancellation insurance alone costs 5% to 6% of the coverage amount. But you often pay more, because travel agents push comprehensive policies costing up to \$800, which bundle several types of coverage. Cancellation waivers giving customers the right to back out, sold by travel providers but not guaranteed by insurers, run as high as \$100 per person. *Jim El*

Investors looking for a quick buck should stay away from the former Soviet Union. Political fragmentation and a severe credit crunch have frozen near-term business prospects colder than the Moscow streets.

But for investors with patience, the Commonwealth of Independent States may be worth the wait. "It's going to be several years at a minimum before we see any positive benefits come out of there," says Michael LaTronica, analyst at Martin Simpson & Co. in New York.

Even so, a few companies have seen immediate rewards from the CIS. Philip Morris shipped 20 billion cigarettes to the former Soviet Union last year. Estimated operating profit: \$100 million. Rival RJR Nabisco

shipped 17 billion cigarettes, netting an estimated \$40 million profit. Now, both companies are negotiating for further sales on a republic-by-republic basis.

One simple investment approach: If you like a stock

for its present fundamentals, consider its CIS ambitions as a possible long-term positive factor. Also, note that making an investment now in the former Soviet Union is a sign of long-term thinking by managements of such companies. "If you believe that 300 million people is a worthwhile market that you don't want to be shut out of, then you have to invest now," figures Dwayne Andreas, chairman of Archer Daniels Midland. The grain giant expects to spend \$50 million on soy-processing plants in the

CIS over the next two years.

Others are likely to benefit as well. Amoco has plans for production from oil fields in Kazakhstan and Azerbaijan assuming negotiations with the republics progress. Telecommunications companies stand to gain from the need to improve communications.

Payment remains the biggest question for companies scouting opportunities from Moscow to Minsk. Seed giant Pioneer Hi-Bred International built a \$10 million conditioning plant in Rovno two years ago and constructed another in a joint venture with a Soviet company. "So far, we've gotten paid for our efforts, but we're not sure about the future," says Vice-President James Anderson. Still, companies and investors who stick it out in these tough times could eventually see the profit roll in like a St. Petersburg blizzard. *David Greisinger*

Smart Money

FROM MOSCOW TO MINSK: INVESTING FOR THE LONG HAUL

SETTING SIGHTS ON EX-SOVIETS

Company/Commonwealth investments

ARCHER DANIELS MIDLAND Spending \$50 million on soy processing plants over next two years

JOHNSON & JOHNSON Pursuing joint ventures for manufacturing health care products

PEPSICO Continuing \$3 billion expansion of bottling plants; opening Pizza Huts

PIONEER HI-BRED Owns \$10 million seed conditioning plant in Rovno

DATA-BW

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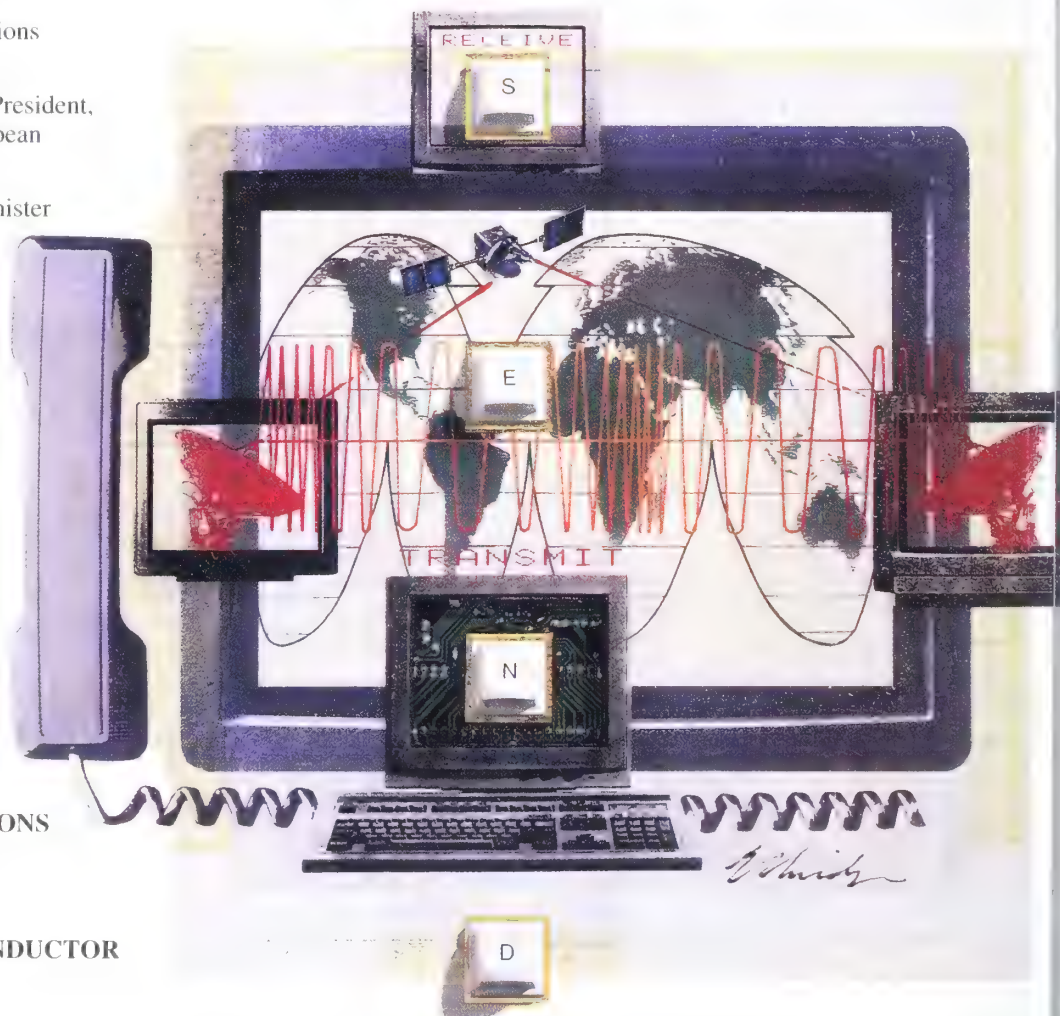
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SYSTEMS INTEGRATION IN THE AGE OF MARKET INTEGRATION

The Future of World Telecommunications



BusinessWeek

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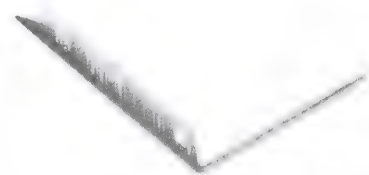
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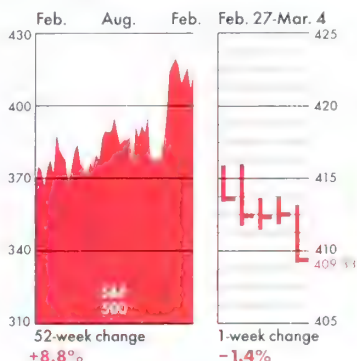
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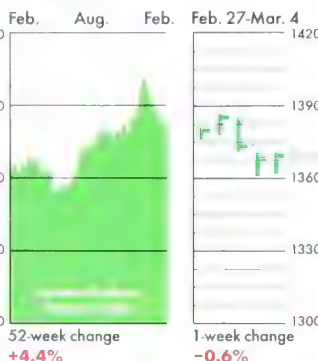
COMMENTARY

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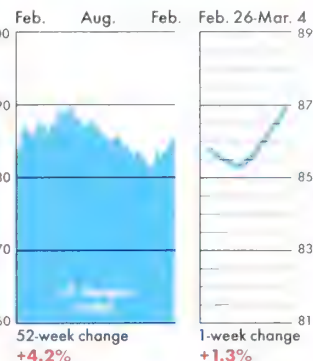
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS

	Latest	Week	% change 52-week
DOW JONES INDUSTRIALS	3268.6	-0.4	9.9
COMPANIES (Russell 1000)	217.9	-1.3	11.1
COMPANIES (Russell 2000)	211.3	0.5	26.5
COMPANIES (Russell 3000)	233.2	-1.2	12.0

HIGH STOCKS

	Latest	Week	% change (local currency) 52-week
DOW JONES (FINANCIAL TIMES 100)	2558.4	-0.3	4.0
NIKKEI INDEX	21,105.4	-1.2	-20.0
TSE COMPOSITE	3587.6	0.2	0.5

INDUSTRY GROUPS

4-WEEK LEADERS

	4-week	52-week
INSTRUMENTATION	23.6	53.5
TRANSPORTATION SERVICES	21.2	34.5
MINING	16.3	50.7
VEHICLES	13.5	4.3
MACHINE TOOLS	12.7	25.3

4-WEEK LAGGARDS

	4-week	52-week
HOSPITAL MANAGEMENT	-10.5	-30.9
AL	-7.2	-11.0
SPECIALTY APPAREL RETAILERS	-6.4	48.9
HEALTH CARE SERVICES	-5.0	69.7
MEDICAL PRODUCTS AND SUPPLIES	-4.8	23.0

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	4.13%	4.05%	6.3%
30-YEAR TREASURY BOND YIELD	7.91%	7.85%	8.3%
S&P 500 DIVIDEND YIELD	2.96%	2.97%	3.2%
S&P 500 PRICE/EARNINGS RATIO	25.5	25.7	17.5

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	396.7	396.0	Positive
Stocks above 26-week moving average	70.2%	68.8%	Neutral
Speculative sentiment: Put/call ratio	0.34	0.36	Neutral
Insider sentiment: Vickers sell/buy ratio	1.51	1.94	Positive

BRIDGE INFORMATION SYSTEMS INC.

Strongest stock in group

	4-week	52-week	Price
HEWLETT-PACKARD	26.2	58.9	75 7/8
FEDERAL EXPRESS	25.3	33.4	53 7/8
MIRAGE RESORTS	30.6	38.8	36 1/4
CHRYSLER	15.0	23.2	17 1/4
CINCINNATI MILACRON	16.7	17.7	16 3/8

Weakest stock in group

	4-week	52-week	Price
NATIONAL MEDICAL ENTERPRISES	-11.2	-33.3	14 7/8
WESTMORELAND COAL	-11.1	-19.0	16
LIMITED	-8.4	21.1	28 3/4
ALZA	-7.4	39.1	45 3/8
BIOMET	-13.1	59.3	21 1/2

MUTUAL FUNDS

LEADERS

	4-week total return	%
FIDELITY SELECT AUTOMOTIVE	10.1	
FIDELITY SELECT PHOENIX A	8.1	
FIDELITY SELECT REGIONAL BANKS	8.1	
	52-week total return	%
PENHEIMER GLOBAL BIO-TECH	74.1	
AMERICAN HERITAGE	69.1	
U.S. LIFETIME EMERGING GROWTH	67.2	

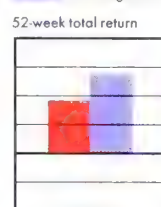
LAGGARDS

	4-week total return	%
STRATEGIC INVESTMENTS	-10.3	
UNITED SERVICES GOLD SHARES	-9.9	
FIDELITY SELECT BIOTECHNOLOGY	-7.7	
	52-week total return	%
FIDELITY SELECT ENERGY SERVICE	-30.1	
STRATEGIC GOLD/MINERALS	-27.6	
STRATEGIC INVESTMENTS	-24.3	

S&P 500



Average fund



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invested the present
value of \$10,000
invested one year ago
each portfolio
percentages indicate
year total returns


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+0.27%


Money market fund
\$10,473
+0.07%


Foreign stocks
\$10,091
+0.16%


Gold
\$9,344
+0.10%

DATA RESOURCES INC.

Figures on this page are as of market close Wednesday, Mar. 4, 1992, unless otherwise indicated. Industry groups include S&P 500 companies only; performance and share prices are as of market close.

Mar. 3. Mutual fund returns are as of Feb. 28. Relative portfolios are valued as of Mar. 3. A more detailed explanation of this page is available on request.

FREE TRADE WITH MEXICO: GAIN, PAIN, RETRAIN

When the fortunes of your neighbor, especially a neighbor who has been poor, begin to improve, you might smile at your neighbor's good fortune. But if you believe that the gain is owing to your loss, it's natural to feel less than charitable about the trade-off. The United Auto Workers looks at plant closings and job losses at home, compares them with factory openings and job gains in Mexico, and makes a simple calculation: Mexican workers are gaining at U.S. workers' expense, and so free trade is bad. Thanks in large part to the stunning successes of Detroit South (page 98), opposition to the planned North American Free Trade Agreement is growing.

But free trade is not now and never has been a zero-sum game. Since World War II, rising trade has helped drive economic development and growth around the world. Experts believe that a free-trade agreement that pulls Mexico into the North American fold, accompanied by further economic reform in Mexico, will have similarly salutary effects: According to a recent study published by the Institute for International Economics in Washington, about 130,000 net new jobs should be created in the U.S. by 1995, thanks to increased demand for U.S. goods from Mexico. Meanwhile, 600,000 new jobs should be generated in Mexico.

But the gain in U.S. jobs will come only after 112,000 jobs are lost. This "dislocation," as economists call it, is a natural and expected consequence of expanding trade. More trade means more competition, and competition points up the differences in costs and quality between manufacturers and across borders. Mexican auto workers are not only far cheaper to employ than U.S. auto workers, but they have also shown that they can produce high-quality products.

The lesson of Detroit South is twofold. First, auto makers and auto workers alike must redouble their efforts to bring quality and efficiency improvements to U.S. plants. Second, U.S. workers who do lose their jobs should be granted generous assistance for retraining so they may qualify for new jobs. Yet President Bush's fiscal budget for 1993 calls for the elimination of the Trade Adjustment Assistance program. If the Administration hopes to make a convincing case for North American free trade, it should not overlook the needs of job-losers at home.

HOW TO DISARM THE NEW NUCLEAR THREAT

When the Soviet Union fell apart last fall, one of the first worries in the West was the fate of its 27,000 nuclear weapons and the experts who designed them. Today there is a much more immediate, and equally grave, concern. The operation of civilian nuclear power stations has been seriously undermined by the breakup of the Soviet Union (page 116). Reactors are now

rarely inspected for safety. Security, once handled with typical KGB overkill, is virtually nonexistent. Critical spare parts are unavailable, and the oversight of rickety plants has fallen to newly independent republics lacking the necessary funds or skills. Another Chernobyl is waiting to happen.

Five nuclear stations, one located only 70 miles from Helsinki, are most at risk. They contain 15 graphite-moderated reactors similar to the Chernobyl model. Although they underwent safety retrofits after the 1986 disaster, basic design flaws weren't fixed. Should they explode and burn, as Chernobyl did, no containment dome will keep extremely high levels of radioactivity from threatening millions in the former Soviet Union and Europe.

The West is not yet paying sufficient attention to this new nuclear threat. The European Community and the Vienna-based International Atomic Energy Agency are only now beginning to study the problem. The Bush Administration is eager to ensure that the Soviet defense capability is choked off, continues to restrict certain high-technology exports—exports that might just make the reactors safer. Now some Western European power engineering companies, such as Germany's Siemens, are urging the establishment of a \$7.5-billion fund to finance the decommissioning or retrofitting of Soviet-built reactors throughout the former Soviet Union and Eastern Europe. That's a tall order, and taxpayers may not be happy to subsidize what could be a business bonanza for some companies. The nuclear industry and its suppliers should donate money and expertise. After all, if another Chernobyl, or worse, happens, nuclear power generation around the world will be set back for years, if not decades.

GIVING AT THE OFFICE: MAKE SURE IT'S A CHOICE

It would be tempting, in the wake of the recent scandal over lavish spending and mismanagement at the United Way of America, to argue that corporations should bow out of the business of sponsoring and organizing charity drives in the workplace. After all, choosing to donate money to a charitable cause should be an individual decision, and there is no reason why workers shouldn't make that decision on their own (page 39).

The problem is that even those inclined to give sometimes don't—out of laziness or lack of information. What corporate-sponsored drives can do is provide a nudge, and perhaps make it a tad easier for people to check off a charity or two and write a check. But companies should organize the process very differently from in the past.

First, there should be no hint of coercion. Second, and more important, corporations must endeavor to give employees a real choice. For years, the United Way has exercised a virtual monopoly over employee-giving campaigns, with only the relatively established and mainstream charities listed as beneficiaries. Recently, some companies have broadened the range of charities or charity federations that employees may select. This may raise the cost of funneling donations slightly, but it's the best way to ensure that the process is conducted fairly.

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BusinessWeek



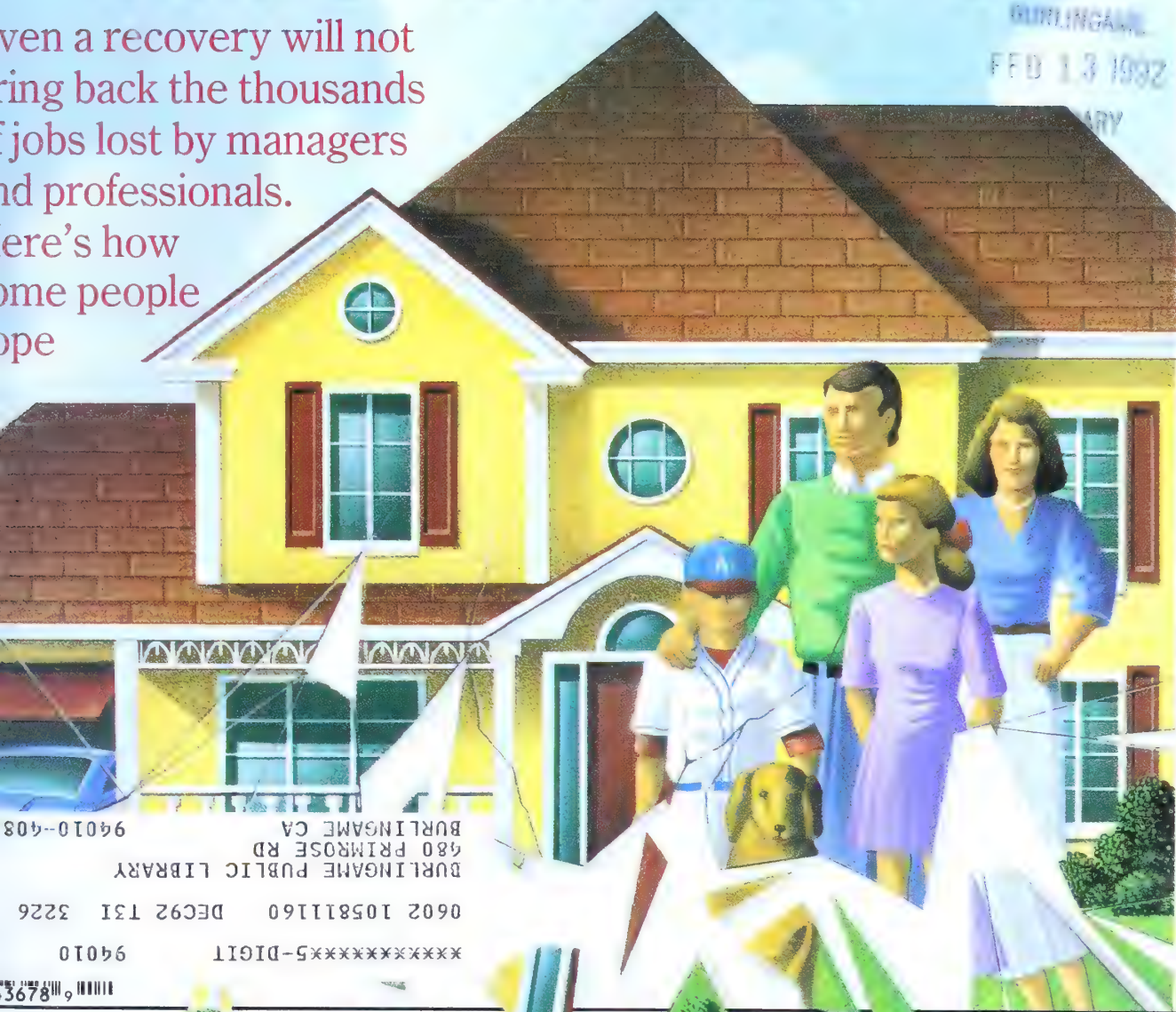
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DOWNWARD MOBILITY

Even a recovery will not
bring back the thousands
of jobs lost by managers
and professionals.
Here's how
some people
cope



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YEAR'S. THIS YEAR, WITH ANY LUCK**



THEIR CHRISTMAS AND NEW I'LL GET MOTHER'S DAY TOO."

BILL HAYDEN, CHAIRMAN, COMPUADD COMPUTER CORPORATION



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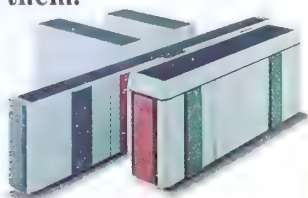
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thing to talk about.



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J. THOMAS BYROM LOST HIS JOB. NOW HE'S SELF-EMPLOYED, AND HIS WIFE, REBECCA, AUGMENTS THEIR INCOME SELLING HERBAL WREATHS

Cover Story

56 DOWNWARD MOBILITY

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Nixon is right on target

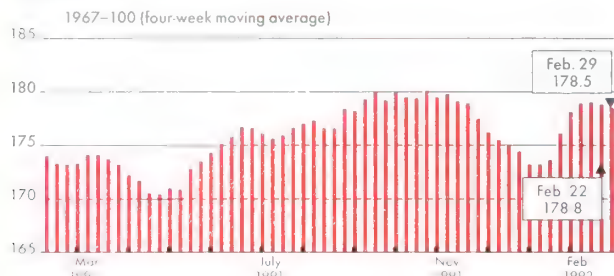
Attacking a law firm with a pickax

Cool down trade friction with Canada

BusinessWeek Index

PRODUCTION

Change from last week: -0.2%
Change from last year: 3.0%

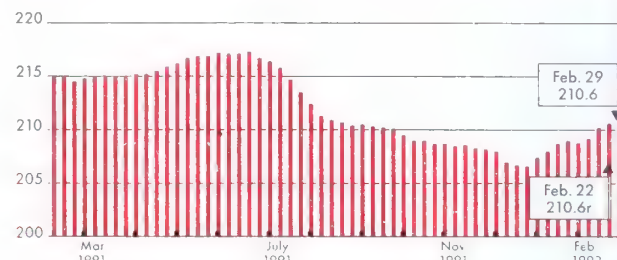


The production index fell slightly during the week ended Feb. 29. Seasonally adjusted output of steel, autos, crude-oil refining, and coal declined, while lumber, truck, and electric power output increased. Rail-freight traffic was unchanged. Data for paper and paperboard were unavailable for the week. Before calculation of the four-week moving average, the index dropped to 177.9, from a revised 178.1. The index increased to 178.5 in February, from 176.6 in January.

BW production index copyright 1992 by McGraw Hill Inc.

LEADING

Change from last week: 0.0%
Change from last year: -2.0%



The leading index was nearly unchanged during the week ended Feb. 29. Higher stock prices, slightly lower bond yields, and improvement in the growth rates for M2 and materials prices offset a sharp increase in the number of business failures and further deterioration in real estate loans. Before calculation of the four-week moving average, the index slipped to 209.6, from 210.2 in the previous week. For all of February, the leading index increased to 210.6, from 209 in January.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (3/7) thous. of net tons	1,787	1,785#	6.2
AUTOS (3/7) units	119,713	107,447r#	19.2
TRUCKS (3/7) units	79,297	80,940r#	21.1
ELECTRIC POWER (3/7) millions of kilowatt-hours	52,461	54,099#	-1.4
CRUDE-OIL REFINING (3/7) thous. of bbl./day	12,267	12,223#	-6.3
COAL (2/29) thous. of net tons	19,136#	19,789	-6.7
PAPERBOARD (2/29) thous. of tons	NA#	811.3r	NA
PAPER (2/29) thous. of tons	NA#	773.0r	NA
LUMBER (2/29) millions of ft.	519.2#	504.3	6.3
RAIL FREIGHT (2/29) billions of ton-miles	21.0#	20.8	7.1

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWP, SFA; Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (3/11)	134	132	136
GERMAN MARK (3/11)	1.67	1.66	1.59
BRITISH POUND (3/11)	1.72	1.73	1.85
FRENCH FRANC (3/11)	5.67	5.66	5.41
CANADIAN DOLLAR (3/11)	1.19	1.19	1.15
SWISS FRANC (3/11)	1.51	1.52	1.38
MEXICAN PESO (3/11)	3,046	3,045	2,975

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (3/11) \$/troy oz.	349.000	350.150	-4.6
STEEL SCRAP (3/10) #1 heavy, \$/ton	90.00	89.50	-11.8
FOODSTUFFS (3/9) index, 1967-100	205.5	203.2	-2.8
COPPER (3/7) c/lb.	106.9	107.0	-8.1
ALUMINUM (3/7) c/lb	60.3	61.5	-14.5
WHEAT (3/7) #2 hard, \$/bu	4.23	4.33	43.9
COTTON (3/7) strict low middling 1-1/16 in., c/lb	51.42	51.67	-35.0

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (3/6) S&P 500	409.12	412.93	9.2
CORPORATE BOND YIELD, Aaa (3/6)	8.32%	8.31%	-6.7
INDUSTRIAL MATERIALS PRICES (3/6)	95.8	95.9	0.3
BUSINESS FAILURES (2/28)	480	462	85.3
REAL ESTATE LOANS (2/26) billions	\$400.9	\$402.1r	-2.4
MONEY SUPPLY, M2 (2/24) billions	\$3,388.7	\$3,382.6r	3.3
INITIAL CLAIMS, UNEMPLOYMENT (2/22) thous	437	459	-14.0

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusted data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
BUSINESS WEEK PRODUCTION INDEX (Feb.)	178.5	176.6r	3.0
BUSINESS WEEK LEADING INDEX (Feb.)	210.6	209.0r	-2.0
EMPLOYMENT, CIVILIAN (Feb.) millions	117.0	117.1	0.1
UNEMPLOYMENT RATE, CIVILIAN (Feb.)	7.3%	7.1%	12.3

Sources: BW, CIBCR, BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (2/24)	\$933.8	\$931.5r	11.7
BANKS' BUSINESS LOANS (2/26)	288.9	289.4	-10.9
FREE RESERVES (3/4)	898	1,103r	6.3
NONFINANCIAL COMMERCIAL PAPER (2/26)	135.7	134.8	-5.3

Source: Federal Reserve Board (in billions, except for free reserves, which are expressed for a two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (3/10)	3.87%	4.02%	6.17%
PRIME (3/11)	6.50	6.50	9.00
COMMERCIAL PAPER 3-MONTH (3/10)	4.26	4.28	6.33
CERTIFICATES OF DEPOSIT 3-MONTH (3/11)	4.22	4.21	6.35
EURODOLLAR 3-MONTH (3/7)	4.20	4.16	6.71

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment.
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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SOME ENDORSEMENTS FOR KRISTI YAMAGUCHI

In reference to your excellent article "To marketers, Kristi Yamaguchi isn't as good as gold" (Top of the News, Mar. 9), this is only another example of the anti-Asian hysteria brought about by the stagnant domestic economy. Last year's "model minority" has become this year's scapegoat. Unfortunately, many in the American public fail to differentiate between the activities of Asian-Americans and overseas countries. Asian-Americans are as committed as any other ethnic group to the political, religious, and economic institutions of America.

Dave Chiang
Colts Neck, N.J.

Americans come in many faces. I was outraged to read that "companies may be shying away from Yamaguchi because of her ethnic heritage." America is united by the concept of equality of opportunity and the recognition of each individual's achievement. Kristi (and many others with her ethnic background) represents talent, energy, and excellence. She should be a role model for our society. Or do advertisers prefer Bart Simpson?

As president of a new biotechnology company, I regret that our company is still early in the research phase and not yet ready to involve Yamaguchi in promotional efforts.

Elliot Lebowitz
President & CEO
Biotransplant Inc.
Charlestown, Mass.

HOLIDAY INN CAN REST EASIER WITH MORE BEDS

Culling 40% of the 1,300 U.S. franchises, as suggested in your article "Bass can't get comfortable at Holiday Inns" (Top of the News, Mar. 2), would be economic suicide for Holiday Inn, creating a revenue and profitability slump that could last into the 21st century. With one of the strongest brand names in the industry, Holiday Inn should stay committed to its spending plan of providing loans for capital improvements to its

franchisees. Otherwise, the higher-quality Holiday Inn franchises may change affiliation, leaving the chain to compete in a lower market tier.

Monty Bennett
Mariner Hotel Corp.
Dallas

Your article caught my attention because it discussed the problem Holiday Inn is having with losing some of its major U.S. and British hotel franchisees to the Marriott nameplate. Interestingly, the photo that appeared with your article was of a new Holiday Inn Crown Plaza in Kansas City, Mo.—a hotel that Holiday Inn franchised when who else but Marriott lost the franchise there last year!

John O'Neill
Senior Hotel Consultant
Coopers & Lybrand
New York

BIG OR SMALL, AUDITORS ARE ONLY AS GOOD AS THEIR DATA

In "Is College Bound for real? The SEC wants to know" (Top of the News, Feb. 10), you quote accounting Professor Howard Schilit as critical of some of the company's accounting methods, including having a sole practitioner handle its books instead of an accounting firm. As a society representing over 33,000 CPAs from practice units of all sizes, we want to stress that, contrary to the article's inference, the size of a CPA firm has no direct relation to the quality of services performed. The Crazy Eddie case is just one example of management fraud committed by a small company that had been audited by a major accounting firm, but we also want to point out that fraud and perceived audit failure can occur in corporations of all sizes. CPAs can evaluate only financial information that management discloses.

It is the role of a company's board of directors and audit committee to more closely monitor management's internal activities and ensure that the outside auditor receives the full picture. One alleged case of misconduct, if this proves to be the case with College Bound's CPA, does not and should not imply that the role of independent auditor is compromised.

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ou look closely, you can see yourself. The Accord Coupe. **HONDA**

Readers Report

watchdog, regardless of the size of the company or its accounting firm.

Robert L. Gray
Executive Director
New York State Society
of Certified Public Accountants
New York

CHRYSLER-MITSUBISHI: A 'DISAPPOINTMENT' TO WHOM?

I read your recent story "The Partners" (Cover Story, Feb. 10) with great interest. I agree with you that Ford and Mazda have developed an excellent American-Japanese automotive strategic alliance. However, I strongly disagree with your evaluation of the Chrysler-Mitsubishi alliance as a "cross-cultural disappointment." Our global alliance, now 21 years old, not only rivals the scope of Ford-Mazda but is also eight years its senior. We now do over \$1.5 billion in joint business and expect that number to double by the mid-1990s. We value highly our relationship with our partner, Mitsubishi Motors (MMC).

No one will dispute that Chrysler takes a strong position on trade, with an emphasis on fairness and reciprocity between the U.S. and Japan. These same

principles govern our expectations and our experience with the Chrysler-Mitsubishi relationship. We only wish that we could prod the governments of the U.S. and Japan to work as well together, to open Japan's closed markets, and to reduce our crippling trade deficit, as Chrysler and Mitsubishi do on a business and technical level.

From 1970 to 1985, our alliance grew from a U.S. distribution agreement of MMC vehicles for Chrysler to include mutual technical assistance and an agreement for Chrysler to purchase jointly developed three-liter engines from MMC. In 1985, we agreed to build the Diamond-Star Motors plant in Illinois to assemble the jointly developed Plymouth Laser, Eagle Talon, and Mitsubishi Eclipse sports cars. Since that time, we've worked together on other projects, including the very successful Dodge Stealth and Mitsubishi 3000 GT sports cars.

Although we restructured the Diamond-Star venture last October with the sale of our equity share in the plant to MMC, we are by no means heading for divorce court. While MMC has obtained full ownership of Diamond-Star, Chrysler has retained the right to half of the

plant's current and future production.

I believe that my colleagues at MMC would agree that our relationship is "win-win."

Joseph E. Cappy
Vice-President
International Operations
Chrysler Corp.
Highland Park, Mich.

GERMANY SHOULD MAKE GOOD ON EXPROPRIATED PROPERTY

It will take more than the General Agreement on Tariffs & Trade for Germany to become "firmly rooted in the West," as suggested in your article "Learning to live with the new Germany" (International Business, Feb. 17). Germany had better begin by accepting one of the basic tenets of Western democracies and recognize the private property rights of its citizens, as well as those of some 2,000 Americans whose property was expropriated by the former East German communist government. In my sisters' and my case, the German government has stated its willingness to sell us back just a portion of our confiscated property but not grant us private property rights to it. If Ger-



Just A H

y wants to claim it is Westernized, it
ld play by West German, not East
man, rules.

Otto F. Grote
New York

SIEMENS DOES STAND ALONE

Europe's best high-tech hope ("The
new generation at Siemens," Inter-
nal Business, Mar. 9) is not a single
many but rather a strong and com-
pactive, European-based information
technology industry, which certainly in-
cludes Groupe Bull. Groupe Bull, incor-
porately labeled a "national champion,"
has satisfied customers in more than
100 countries worldwide—today, and
into the future.

Patrick Marx
Groupe Bull
Paris

FUTURE TRENDS TO MICROSOFT

Next time in business conversa-
tion someone remarks to me: "The
special markets only value quarterly
results and short-term management
reporting," I'm going to have them read
Microsoft" (Cover Story, Feb. 24). With

CORRECTIONS & CLARIFICATIONS

A caption (Table of Contents, Mar. 9)
mistakenly referred to the Chicago op-
tions exchanges. It should have stated
that the Chicago futures exchanges
have suffered from a lack of new prod-
ucts and from competition from up-
start rivals.

In "Why not write off 1991? Everyone
else did" (Corporate Scoreboard, Mar.
16), we misstated IBM's loss for 1991.
The correct number is \$564 million.

1991 revenues only about one-fiftieth of
General Motors', Microsoft's market val-
uation today exceeds that of GM. I can't
imagine a more vivid repudiation of con-
ventional wisdom about how markets
value only short-term company perfor-
mance. It's clear to anyone who looks at
these facts that the capital markets do
value the long term when there is faith
in a company's management, products,
and growth prospects, as is the case
with Microsoft. Perhaps Bill Gates, rat-
her than GM's Bob Stempel, should have
been on Air Force One during President
Bush's most recent trip to Japan.

Steven P. Korn
North Potomac, Md.

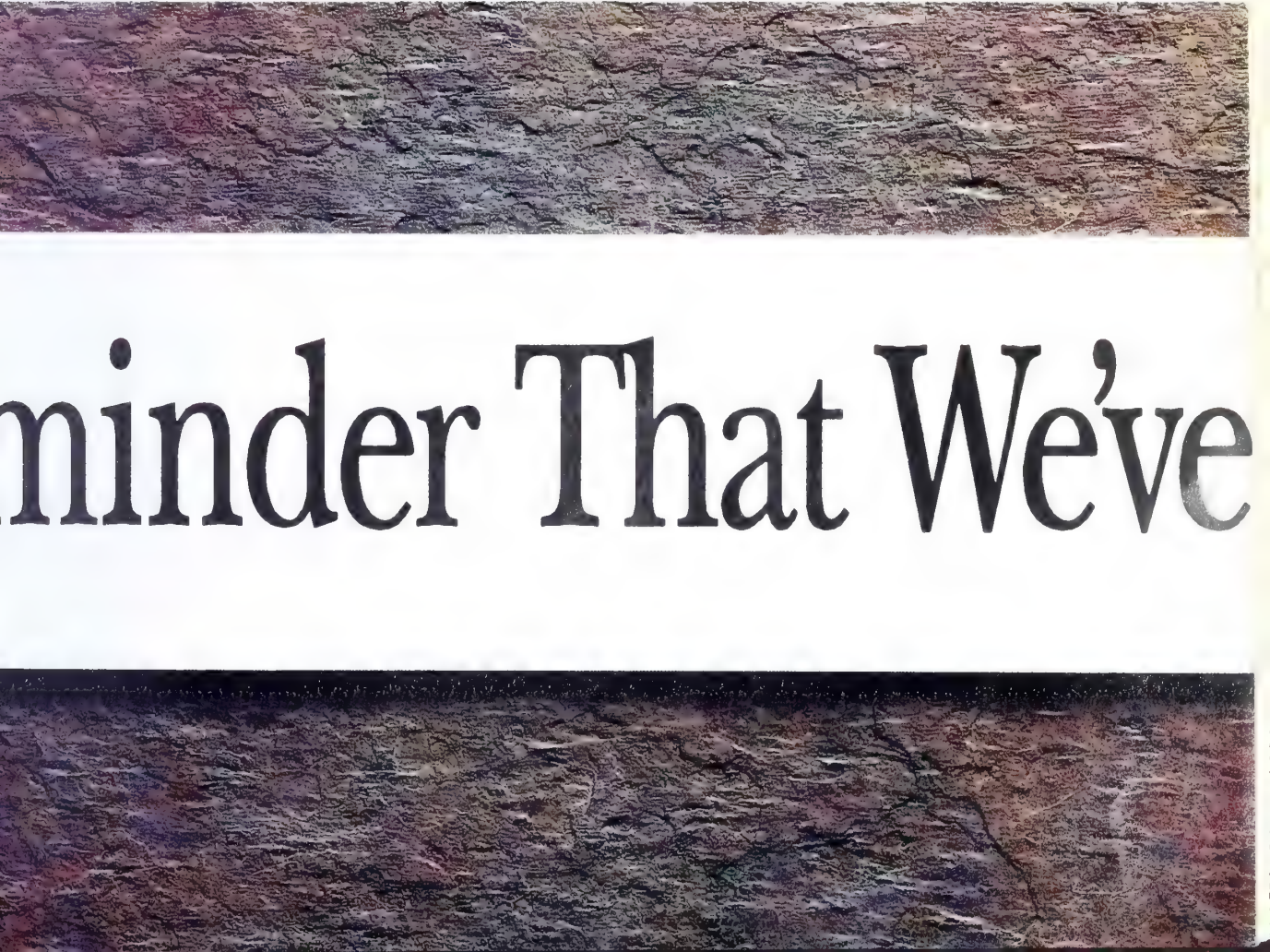
One clarification needs to be made
regarding the sample Microsoft in-
terview questions listed in your story. In
the answer section, the answer to ques-
tion #3, "If you were to put artificial
turf on all Major League ballfields, how
many square yards would you need?"
was supposed to be reached by the
"same type of process as #2" ("How
many gas stations are there in the
U.S.?").

The process followed in answering
each question would actually be differ-
ent, since you don't need to put artificial
turf on all of the ballfields: Many al-
ready have it—10 out of 26, to be exact.
Using approximate figures, you would
need about 208,000 square yards of arti-
ficial turf (114 yards x 114 yards x 16
stadiums, rounded to the nearest thou-
sand), so that all 26 Major League ball-
fields would be covered by the stuff
(which, by the way, would be a crime).

So, Mr. Gates, when can I report to
work for Microsoft?

Dante A. Bacani
Chicago

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phone numbers. We reserve the right to edit letters
for clarity and space.



Reminder That We've

TECHNOPOLY: THE SURRENDER OF CULTURE TO TECHNOLOGY

By Neil Postman

Knopf • 222pp • \$21

THE TYRANNY OF TECHNOLOGY

Almost from the beginning, technology has been a central character in the American historical drama. As the young nation came of age, machines smashed old limits and conquered new frontiers. The railroad wended its way from sea to shining sea, the telegraph annihilated distance, the light bulb pushed back the darkness. Inventors such as Eli Whitney, Alexander Graham Bell, and Thomas Edison were the Prosperos of this brave New World.

Early on, too, there were those who saw doom in America's rapid industrialization. In 1851, novelist Herman Melville described in loving detail the technology that made American whaling ships perhaps the most highly specialized and commercially successful machines of their time. But he put a madman at the helm of the *Pequod* and had

him take the ship to the bottom of the sea. Today, social critic Neil Postman might argue, the crew is blissed out on *The Simpsons*, Ahab is playing computer games on his Mac, and the ship itself—technology—has taken charge. America, Postman says, has become the first nation to regard technology not as the means to an end but as the end itself.

Postman calls this new milieu, in which technology monopolizes every aspect of life, technopoly. The nation, he argues, now looks to science, technology, and a blind pursuit of efficiency as its primary sources of cultural meaning and authority. Lost are the traditional moral underpinnings provided by institutions such as religion and the state. Postman doesn't argue against technology per se; few would listen if he did.

Rather, he seeks to spur a better understanding of and stronger debate about what technology and the related faith in numbers and scientific "objectivity" are doing to this country. And in that, he's quite successful.

Postman, a New York University professor best known for his critiques of TV and other mass media, first synthesizes from his own and others' work a brief but engaging history of humanity's relationship with technology. Using vivid anecdotes, he explains the move from what he calls tool-using society to technocracy—in which inventing new tools becomes key—and finally, to technopoly. This alone is worth the cover price for readers who have never contemplated what the world was like before it became soaked in technology—and even for those who have.

From there, Postman describes technopoly in detail, offering particularly original insights into the much-ballyhooed Information Age. Don't expect Postman to cheer because computers are doubling in power every two years or because there are schemes afoot to put high-definition television into every home. He sees millions of TVs, computer screens, and loudspeakers washing away

Been Printing Lonr

tion in a flood of con-
free information.

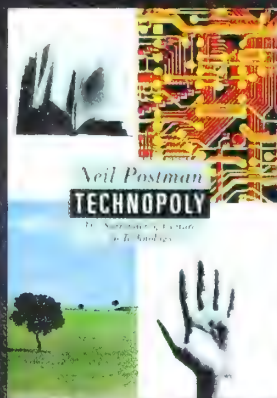
chnopoly, he says, "is
happens to society
n the defenses
st information glut
broken down."

ng our shattered de-
es, Postman counts
ols, religion, and the
ty. These institutions
provided a theoretic-
framework that people
to evaluate new in-
ation and give—or
—it meaning. Post-
suggests that one
on Americans resort
igation as much as
do is that legal the-

and its rules for determining the
ance of information have remained
y stable. But for the most part, the
itional information filters don't
. So we turn increasingly to ex-
, bureaucrats, and social scientists
abetted by computers, control the
of data.

technopoly, statistical measure-
s—from opinion polls to IQ tests—
paramount. The price, says Postman,
e loss of society's cultural "narra-
the story of human history by

Exploring 'what
happens to society
when the defenses
against information
glut' break down



which people find meaning and purpose
in life and death. A continual bombard-
ment of glowing electronic images has
drained the significance from such once-
vibrant cultural symbols as Uncle Sam
and the Statue of Liberty. Schooling,
meanwhile, is turning into a collection of
"learning technologies" that educators
use to instill a morally bankrupt "cultural
literacy"—lists of barren facts.

It's easy to criticize, Postman admits,
and harder to decide what to do. First,
he says, we must recognize that technol-

students in semantics—how meaning is
constructed—so they would be better
equipped to debate and modify the work-
ings of technopoly.

Postman's subject is so amorphous
and fast-changing that at times he nearly
loses his grip on it. Still, he succeeds
at his most important task: making us
pause to question the ramifications of
technology's relentless march.

BY JOHN W. VERITY

Verity covers computing for BUSINESS
WEEK

ogies "alter the structure
of our interests: the
things we think about
...and the character of
our symbols: the things
we think with." One reme-
dy would be a school
curriculum in which all
subjects are taught as
history—the history of
mathematics, the history
of music, the history of
history itself. That, he be-
lieves, would foster a new
cultural theme—the as-
cent of humanity—and
with it a restored sense of
purpose, meaning, and in-
terconnectedness. He
would also instruct all

c Than Any Other

THE CONGRESSIONAL BUDGET OFFICE'S SKEWED NUMBERS

BY PAUL CRAIG ROBERTS



PAUL CRAIG ROBERTS IS CHAIRMAN OF THE INSTITUTE FOR POLITICAL ECONOMY IN WASHINGTON

The Congressional Budget Office (CBO) is described in the media as nonpartisan. Such a designation permits the Democratic leadership on Capitol Hill to pretend that the CBO's economic estimates are objective. Many of the CBO's numbers are sound, but the closer they get to disputed policies, the more the numbers are slanted in favor of the Democrats who control the office.

One good example is the CBO's estimate of capital-gains income. In response to questions from Representative Richard Armey (R-Tex.), a professional economist who could not be bamboozled, the CBO recently conceded that its estimate of capital-gains income for 1990 had been off by more than 100%. The CBO had projected that capital-gains income in 1990 would be \$134 billion higher than it was.

This is important because the CBO's amazingly overinflated estimate was used by the Joint Taxation Committee in reckoning its estimate of the revenue loss from cutting the capital-gains tax rate. The overestimate of capital-gains in-

come more than doubled the estimated revenue losses of the popular Archer-Jenkins bill, leading to the 1990 death of this House-passed measure in the Senate for budget reasons.

The same overestimate is the basis of opposition to President Bush's present proposal to cut the capital-gains tax, on the grounds that it would cause too much revenue to be lost and violate the budget agreement.

Because the methodology used by the Joint Tax Committee ignores the disincentive effects of taxation, it is so out of date and behind the times that, at its best, the committee's work is useless. Often, however, it is at its worst. Then the Joint Tax Committee panders to an income leveling ideology that opposes economic growth incentives. The committee believes that the U.S. needs more equality in the distribution of income and, thereby, opposes growth incentives that allow the rich to earn more income along with everyone else.

For example, the committee concedes that a lower capital-gains tax rate has an unlocking

Laser Maker.

t, resulting in greater realizations of capital-gains income as investors become more willing to. The committee now provides an estimate of biased tax revenues from the unlocking effect of a partial offset against its estimate of the revenues. Yet, when the Joint Tax Committee makes up its distributional tables of who gets from a lower capital-gains tax, it does not include the higher tax revenues from the unlocking effect. It simply ignores them.

Thus, by allocating capital-gains income to the rich but not counting the higher taxes that the rich pay from increased realizations, the committee "proves" that a lower capital-gains tax rate primarily benefits the rich.

A competent would be too kind a word to describe this biased methodology, which has contributed to the three-year stagnation of the economy—thus worsening everyone's economic prospects, especially those of the poor.

The CBO's wildly overblown estimate of capital-gains income causes further mischief when it appears in its annual compilation of family-income data. In 1990 and 1991, the CBO's family-income statistics, known as the "Green Book," were pointed out by critics with a penchant for social engineering to prove that Reagan's policies had made the rich richer and the poor poorer. The report then compounded this error by failing to subtract the cost basis of capital gains for inflation. Only nominal gains and even losses were added to the overestimate to further inflate the estimate of real income going to the rich.

When pressed to explain the use of such biased methodology to produce misleading studies, the Joint Tax Committee and the CBO have come up with a dilly of an argument. They assert that the higher taxes paid because of the rise in capital-gains realizations "do not represent an increase in tax burden" because "the choice to realize additional capital gains is a choice by the taxpayer to improve his situation."

CHOICES. With this Alice in Wonderland logic, virtually no tax is part of the tax burden. Income and Social Security taxes don't have to be counted, because the choice to take a job is also a choice by the taxpayer to improve his or her situation. Ditto for corporate, sales, and excise taxes, since the choice to buy a product is "a choice by a taxpayer to improve his situation." This only leaves the estate tax burden, and it falls on the dead. Little wonder liberal Democrats don't understand the tax revolt.

All of economics is about choices. It is because this simple fact escapes the CBO and Joint Tax Committee that they are threats to the economic welfare of the citizens of the U. S. Nothing can be done about these two organizations that block an effective economic policy, because, unlike executive branch agencies or the Federal Reserve, their directors are appointed on the Hill by Democrats behind closed doors by the congressional leadership and are not subject to public oversight and accountability. They are subject only to oversight by the partisan Democratic leadership.

It recently conceded that a calculation of capital-gains income for 1990—used to prove that Reagan's policies had made the rich richer and the poor poorer—had been overestimated by more than 100%

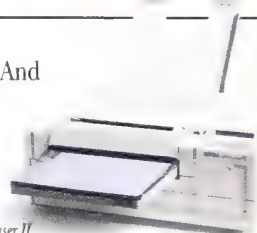
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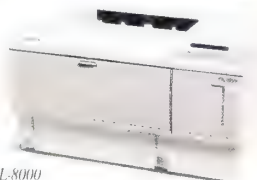
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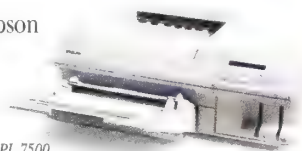
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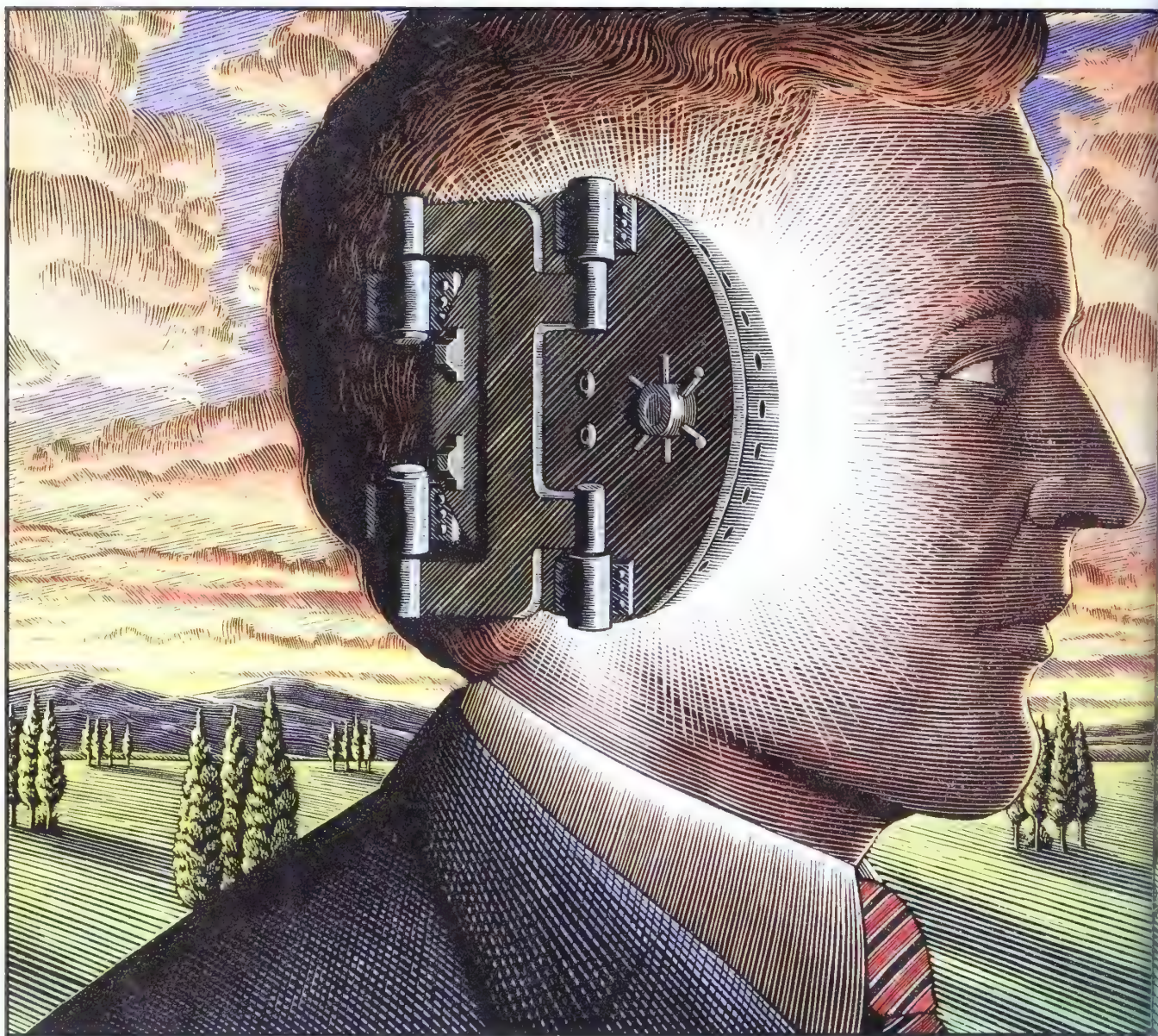
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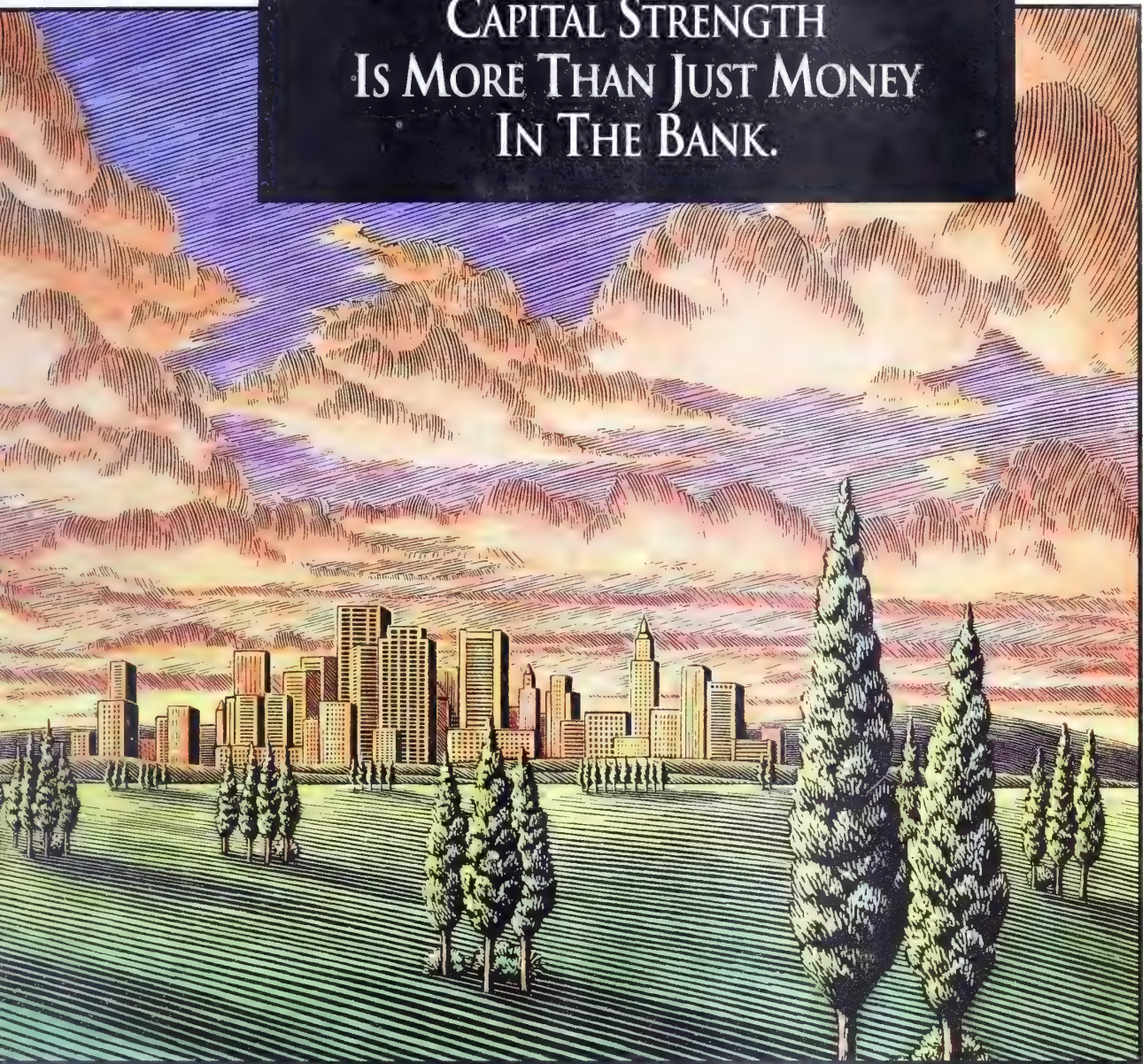
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BY GENE KORETZ

A SLEEPER THAT COULD ROUSE THE RECOVERY

If there's one reason for the consensus expectation of a lackluster recovery in the months ahead, it's probably the reduced role of inventories. Many economists argue that the adoption of strict inventory management techniques in the 1980s has eroded the once-powerful impact of inventory shifts in economic fluctuations. Moreover, a recent inventory surge in the face of declining sales suggests that business inventories remain uncomfortably high.

In past business cycles, inventories have accounted for much of the severity of downturns and the vigor of upturns. That's because companies typically indulge in heavy stock-building in the late stages of expansions, then slash output to reduce excessive inventories once a recession begins, and finally galvanize production to rebuild stocks after demand starts to recover.

This time around, however, stock-

ventory-sales ratios have been relatively flat in recent years as tighter manufacturing inventories have been offset by less stringent controls in the retail sector. For another, a sharp rise in real inventories last quarter was accompanied by an equally sharp pickup in non-petroleum imports, which soared at a 17% annual rate in the second half of last year. Since manufacturers have been slashing inventories during this period, Martini concludes that imports accounted for all of the rise in inventories.

Subtracting imports from the inventory numbers, Martini estimates that real stocks of nonoil domestically produced goods declined at a 2.9% annual rate last quarter (chart). Thus, he predicts that "rising demand will exert a far stronger than normal impact on domestic production in coming months."

WHERE HAVE ALL THE SCIENCE MAJORS GONE? TO EASIER GRADES

One of the most worrisome trends in higher education in recent decades has been an apparent loss of interest by American youth in the sciences and engineering. From 1970 to the mid-1980s, for example, the number of graduating college science majors actually declined at the same time that the college population was exploding.

While many factors contributed to this trend, economists Richard H. Sabot and John Wakeman-Linn of Williams College believe that colleges themselves bear partial responsibility. In a recent issue of *The Journal of Economic Perspectives*, they point an accusing finger at the grade inflation rampant in liberal arts courses since the early 1960s.

The two economists' analysis of grading standards in nine colleges and universities indicates that in the early 1960s, grades were generally similar and low in most departments. But by the mid-1980s, they found that while such departments as mathematics, chemistry, and economics still maintained tough grading standards, other departments such as art, English, music, philosophy, and political science had become high graders, bestowing A- or higher grades on an average 32% of students. By contrast, low-grading departments, such as math, gave such grades to only 19% of students, while 40% of students got C+ or lower grades.

Not surprisingly, the researchers also found that grades had a significant effect on students' subsequent course choices, enhancing the probability of their taking a second course in a high-

grading department and lowering the chances of their studying low-grading subjects. Further, they note that grades in high-grading departments were less accurate predictors of students' subsequent performances in college than grades in low-grading departments.

These findings lead Sabot and Wakeman-Linn to urge a return to stricter grading standards by all departments. Such a change, they say, would "not only provide more accurate information to students about their relative strengths and weaknesses, but might well encourage them to study more science and mathematics."

RIG ORDERS START BARRELING TOWARD DETROIT

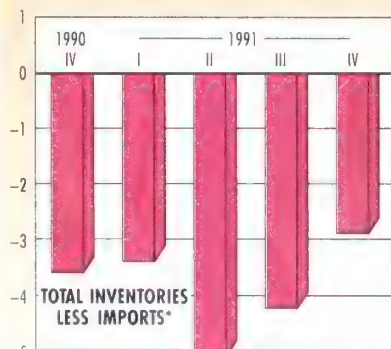
A nemic auto sales continue to dog Detroit despite a slight uptick in February. But there's a hopeful sign just down the road. Ford Motor Co. reports that orders for heavy trucks—the big rigs that roam the interstates and are built to buyers' specifications—have been running 56% above their year-earlier pace in recent months. That's good news, since heavy-truck orders typically perk up early in an economic recovery.

To be sure, no one's celebrating just yet. While fleet buyers, who account for a third of the market, are hitting the throttle, leasing companies and individuals still are holding back, says Ford. And last year's sales were severely depressed by the gulf war and recession.

Still, to meet surging demand, Ford recently canceled two weeks of planned downtime at its truck plant in Louisville, Ky. And smaller trucks are moving faster, too. Judging by past cyclical patterns, cars can't be far behind.

With David Woodruff in Detroit

U.S.-PRODUCED INVENTORIES ARE STILL DECLINING



▲ PERCENT CHANGE, SEASONALLY ADJUSTED ANNUAL RATE
*ADJUSTED FOR INFLATION (EXCLUDES OIL INVENTORIES)
DATA: COMMERCE DEPT., SANFORD C. BERNSTEIN & CO. ESTIMATES

building was relatively restrained before the recession struck—a development related to the extensive use of "just-in-time" inventory-control systems by manufacturers. And just as this restraint contributed to the relative mildness of the recession, most economists believe it will dampen the recovery.

Economist Giulio Martini of Sanford C. Bernstein & Co. thinks an inventory shift could still pack considerable punch, however, propelling the economy forward at a 4%-to-4.5% clip rather than the sluggish 2%-to-2.5% pace that most forecasters anticipate. For one thing, Martini points out that overall real in-

CONSUMERS ARE SPLURGING ON THE SMALL STUFF

H oly ringing cash registers, Batman! Michael Evans of Evans Economic notes that real sales of restaurant meals, airline travel, and recreational service have climbed at a 14% annual rate since October, while motor vehicles, furniture, appliances, and other durables have lost ground. Does the small-ticket surge fore-shadow big-ticket outlays? No, say Evans, who argues that "consumers have moved to small-ticket items because they're still too worried about the future to take on larger debts."

THE PATIENT'S PULSE IS GETTING STRONGER

The economy has taken a turn for the better. Its February heartbeat—payroll employment—was the strongest since May, 1990, before the recession began. That improvement is the most encouraging sign that this sick economy is off the critical list and entering its convalescence.

But don't expect handsprings anytime soon. The 100,000 jump in February jobs was not broad. January losses, now totaling 149,000, turned out to be far greater than first reported. Last month's unemployment rate rose to 7.3%—a 6½-year high. And the structural damage that extended the recession—especially heavy consumer debt—will also sap the strength of the recovery.

Nevertheless, the economy's prognosis looks much better after the February job report than it did after the January report. In addition to the turnaround in payrolls, both the workweek and weekly earnings more than recouped their large January losses. Based on the January job data alone, real gross domestic product in the first quarter appeared headed

for a decline. Now, real GDP seems to be at least holding its own—or perhaps growing a bit.

The best indicator of that is overall hours worked, a good proxy for real GDP growth. In January, hours worked stood well below their fourth-quarter average, reflecting the month's job losses and a plunge in the workweek from 34.5 hours in December to 34.3 hours. But in February, the workweek shot up to 34.7 hours—the longest in nearly three years. Combining that advance with the month's job gains shows that hours worked in the current quarter now stand well above the fourth-quarter level—a good sign for growth (chart).

PAYCHECKS PUT ON A LITTLE HEFT

The most important implication of the February job report, though, is that the vital signs of consumers are improving. Before households can lead a recovery—they must—they will need better cash flow and less debt. There is now growing evidence of both.

Lower interest rates and refinancings are already helping households, although further rate declines now are a long shot. The strength of the job data probably rules out any chance of another near-term cut in interest rates by the Federal Reserve. However, income gains are likely to be ready to take over the job of boosting consumer

spending right where past rate declines leave off.

Indeed, one of the big surprises in last month's employment report was the large gain in paychecks. Weekly earnings jumped 1.5%, to \$364.35 in February (chart), helped by the longer workweek and a 0.3% increase in the average hourly wage, to \$10.50. Although part of that earnings gain reflected a bounceback from a 0.7% drop in January, weekly pay so far this quarter is running well above its fourth-quarter pace.

The February rise in weekly pay was the largest since 1982, but the big difference now is that inflation is less than half of what it was back then. That means consumers are enjoying an increase in their buying power. After adjusting for inflation, weekly earnings this quarter are up 1.1%, at an annual rate.

Those pay gains and the increase in nonfarm jobs last month suggest a generous rise in personal income in February. In fact, after adjusting for inflation and taxes, real spendable income is shaping up to post growth this quarter in the range of 2% to 3%, at an annual rate. That extra cash is why retail sales look a lot better now than they did at yearend, and it could give recession-weary consumers a nice lift this spring.

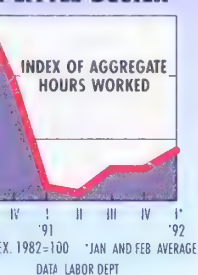
MORE JOBS —BUT EVEN MORE JOB SEEKERS

However, one crocus doesn't make a garden. In order to avoid a repeat of last year's false start, job and wage growth will have to continue making progress in order to guarantee a sustainable consumer rebound. Moreover, the pace of job gains is likely to be far below the normal recovery experience. Corporate restructurings, particularly in the service-producing industries, will limit employment growth.

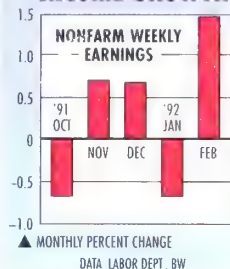
One result: The unemployment rate will be slow to fall, especially as people sense better employment prospects. Early in a recovery, the labor force typically grows faster than new jobs open up. Since November, the labor force has grown at an annual rate of 3%—the fastest three-month pace in three years. That partly explains the 0.4 percentage-point jump in the jobless rate since November, despite a gain in civilian employment.

In addition, job growth promises to be below the usual recovery pace in the very sectors that have accounted for the recession's job losses. Since the downturn began in July, 1990, employment in manufacturing, construc-

COMPANIES GET A LITTLE BUSIER



A SPURT IN INCOME GROWTH



Business Outlook

tion, and retail trade has declined by more than 1.9 million (chart). Jobs in the remaining 60% of nonfarm industries have increased by just over half a million.



by 30,000, despite the housing recovery.

Retail jobs posted the bulk of the February advance in payrolls. They rose by 133,000, following losses for six consecutive months. The gain partly reflected seasonal-adjustment quirks, but it was large enough relative to past declines to suggest that retailers are busier.

WHITTLING DOWN THE STACK OF IOUs

The stubborn uncertainty about future job conditions is one reason why consumers continue to shun most forms of debt. And because of existing debt burdens, credit-financed spending will not play the same strong role in the coming recovery that it has in past upturns.

Consumers keep whittling down their IOUs. In January, installment credit fell for the third consecutive month, dropping \$183 million. Installment debt outstanding now equals 16.9% of disposable income, down from its 18.6% peak of late 1989.

However, some households are just switching one form of debt for another. Home-equity loans are rising, as homeowners take advantage of the lower rates and tax breaks. Since the end of 1990, when the interest on most consumer credit was no longer deductible, install-

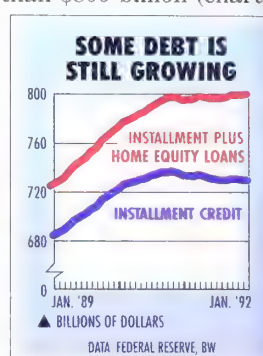
ment credit has fallen nearly \$6 billion, to \$729.2 billion. But home-equity loans and installment debt combined have not lost any ground at all. In January, the combined debt totaled slightly more than \$800 billion (chart).

Even when home-equity loans and installment debt are combined, though, consumers are still unloading their debt burdens. The growth in equity loans and installment credit has been slow enough to lag behind even the modest gains in incomes. The total of installment credit and home-equity loans stood at 18.6% of disposable income in January, up a bit from December's six-year low. But the ratio probably dipped in February, given the month's gain in pay.

In addition to the reduction in installment debt, consumers are also finding it less difficult to pay off their biggest IOU: their mortgages. According to the Mortgage Bankers Assn., the rate of mortgages that were delinquent 30 days or more fell to 4.78% in the fourth quarter, down from 5.07% in the third quarter.

Lower interest rates have created a flood of refinancings and a drop in the monthly payments on adjustable-rate mortgages. Lower mortgage costs have lessened the financial strain on strapped consumers who otherwise may have defaulted. Lower mortgage payments have also freed up more cash for many homeowners.

To be sure, this process of reliquification has only just begun. It will take a long time for consumers to feel financially healthy again, and that will be a drag on the recovery. What's also needed is a few more gains in jobs and incomes like the ones posted in February. Then, while the economy may not be ready to do backflips, consumers could at least spend fast enough to get the patient up and around.



THE WEEK AHEAD

HOUSING STARTS

Tuesday, Mar. 17, 8:30 a.m.

Housing starts probably edged up to an annual rate of 1.18 million in February, say economists polled by McGraw-Hill Inc.'s MMS International. Homebuilding jumped 5.5% in January, to a 1.17 million pace. Most of that increase was in the construction of multifamily housing, although most regions have an oversupply of apartment space. Any gain in February starts will be in single-family homes.

CONSUMER PRICE INDEX

Tuesday, Mar. 17, 8:30 a.m.

Total consumer prices likely increased by 0.3% in February, say the MMS economists. Prices rose only 0.1% in January,

mostly because of falling energy prices. Prices excluding food and fuel probably also rose by 0.3% in February, the same modest gain as in January. Over the past year, prices have increased by just 2.7% for all goods, and by 3.9% excluding food and energy.

INDUSTRIAL PRODUCTION

Tuesday, Mar. 17, 9:15 a.m.

Output at the nation's factories, mines, and utilities likely advanced by a sharp 0.6% in February. Production dropped in each of the three previous months, including a 0.8% drop in January. The February bounceback is indicated by the 0.9% jump in total hours worked in the factory sector. The expected strong rise in output suggests that the capacity-uti-

lization rate for all industry rose to 78.4% in February, from 78% in January.

MERCHANDISE TRADE DEFICIT

Thursday, Mar. 19, 8:30 a.m.

The trade deficit probably narrowed to \$5.4 billion in January, from \$5.9 billion in December, say the MMS economists. Exports, which fell in November and December, likely rose in January. And imports, up 2.3% in December, probably declined in the following month.

FEDERAL BUDGET

Friday, Mar. 20, 2:15 p.m.

The federal government will probably post a \$45 billion deficit for February. If so, that would be almost twice the \$26 billion gap of February, 1991.



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★ CLINTON HAS A CHANCE TO PICK UP HARKIN'S LABOR SUPPORT; TSONGAS IS TRYING TO PICK UP THE PIECES

MARCH 23, 1992

IS IT STILL A HORSE RACE?

BARELY. BUT IT WON'T BE IF BUSH AND CLINTON SWEEP MICHIGAN AND ILLINOIS



George Bush, late of Yale and Skull & Bones, gnawed on some barbecued ribs in Hialeah, Fla., and entered a bass-fishing tournament in Pintala, Ala. Arkansas Governor Bill Clinton prayed and swayed in black Baptist churches in Tennessee and bemoaned the high crime rate with Houston cops. Then Clinton, who had been buffed to a high sheen at Yale Law School and Oxford University, stepped before a throng of Miami supporters and described himself as "an ol' redneck."

Aw, shucks, it worked. On Mar. 10, while their outspent, outgunned, and

out-of-breath rivals struggled to keep up, Bush and Clinton blitzed the South's key Super Tuesday primaries and caucuses. Each scored a Southern and border-state sweep—and paved the way for potentially crippling blows to their opponents in Mar. 17 contests in Illinois and Michigan.

Bush isn't about to snuff out Pat Buchanan's right-wing insurgency overnight, though. Buchanan vows he'll overtake the President in Michigan, a state with 9% unemployment and loads of alienated Reagan Democrats. But as his campaign nears mathematical elimination, Buchanan often verges on crankdom, with calls for Bush's resignation, demands for the ouster of Republican National Chairman Rich Bond, and

threats to wage a *jihad* against Bush and moderate GOP Governor Pete Wilson in California on June 2. "Pat is ripping the Republican Party apart over what appears to be his personal ego," says former Buchanan strategist Anthony Fabrizio. "Just being the loudest, angriest, and meanest isn't going to help him lead the conservative movement in '96."

BEAR HUG. On the other hand, after a 51% to 34% loss to Clinton in Florida's Democratic primary, former Massachusetts Senator Paul Tsongas could use some guerrilla-warfare lessons from Buchanan. He would have plenty of targets, what with Clinton's less-than-maculorous stewardship of Arkansas, his vulnerability on the personal-ethics front, and his fluid shift from moderate

former to darling of Democratic ward
ers.

Chicago, for instance, Clinton has
embraced by Mayor Richard M.
y's organization—a bear hug Tsongas
could profitably condemn as signal-
Clinton's coziness with machine poli-
“Clinton has gravitated toward the
coalition politics of the Democratic
y,” says Dennis Kanin, Tsongas’
paign manager. “What does the guy
d for?”

at Tsongas has yet to mount an ef-
fective counterattack. “I see a lot of Du-
s in Tsongas,” says Steven E.
er, a Carleton College political scien-
“Democrats are worried about that,
they should be.”

Tsongas’ Super Tuesday odyssey is

icularly instruc-
on that score. He
ndered through
South like an eco-
es professor on a
are tour, while
on used Tsongas’
sition to a middle-
tax cut to paint
as a Reagan-Bush

ow, Tsongas faces
k choices: He
erase his image
an exponent of
canal economics
broaden his base
raditional Demo-
or face political
action. On paper,
gas has a potent
for the Rust Belt.

ke Clinton, who
uses investment in
“human capital,”
gas favors an industrial policy to
ild U.S. manufacturing. But his
print is numbingly complex, and his
ort for a capital-gains tax cut and
h-off of the tax “fairness” issue be-
d of congressional Democrats turns
many party activists. “When I listen
songas with my eyes closed, I al-
hear George Bush,” says Joe Man-
, political director for the United
Workers.

THE GUT. Unfortunately for Tsongas,
activists will be key players not
in Michigan and Illinois but in other
ests in such industrial states as New
k on Apr. 7 and Pennsylvania on
28. A special handicap for Tsongas
is inability to connect with blacks.
ton understands the language of
uggle,” says former Black Panther
y Rush, an alderman from Chica-
South Side who’s organizing for
on. “That’s something you get from
gut up, not the head down.”

In the Rust Belt, Clinton is angling to
pick up the labor vote set adrift after
the collapse of Iowa Senator Tom Har-
kin’s campaign. Tsongas hopes, without
much chance of success, to thwart Clin-
ton’s move by highlighting Arkansas’
status as a right-to-work state, its
low wages, and its dismal record
on worker safety. “Clinton has a mis-
erable labor record,” Kanin asserts.
“We need to get that out.”

Buchanan, too, is beckoning to angry
blue-collar. In Michigan, he’s casting
Bush as a country-club Republican who
betrayed workers’ trust on taxes and
throws billions away on foreign aid.
“Our ‘America First’ theme is a natural
for Michigan,” says Angela “Bay” Bu-
chanan, top strategist in her brother’s

Presidential drive.
“Pat gives a voice to
people who are frus-
trated and angry.”

People like Grant
Robinson. A former
General Motors Corp.
worker idled by a
plant shutdown, Rob-
inson, 35, supports his
family of five by
working as a mainte-
nance man—for \$9 an
hour less than he got
at GM. “I’m going
backward,” he says,
huddled with a group
of Buchanan backers
who cheered him dur-
ing a visit to the work-
ing-class suburb of
Wyandotte, Mich.

Buchanan might ap-
proach 40% in Michigan, but he might
also peak. On the stump, the President
is already taking shots at Congress and
trumpeting his devotion to “family val-
ues,” a dart aimed at Clinton.

Faced with a choice between a shop-
worn President and a battered Arkansas
governor, Bush reckons that voters will
stick with the Yalie they know. But
Bush has consistently underestimated
the resentment that’s driving voters this
year. Economic recovery remains iffy.
And a third of Buchanan’s supporters
vow they’ll vote against the President in
November. That residual rage—plus
Clinton’s ability to shift seamlessly from
good ol’ boy to Ivy League policy
wonk—means there’s no cause for cele-
bration at the White House, even as
Bush’s delegates pile up.

By Lee Walczak and Douglas Harbrecht
in Washington, with David Greising in
Chicago, David Woodruff in Detroit, Gail
DeGeorge in Miami, Richard S. Dunham in
Dallas, and bureau reports



★ BUSH'S WINS GIVE HIM
LITTLE CAUSE TO CELEBRATE



With the
Presidential campaign
heating up, hopefuls are promising
this, that, and every other thing
to draw votes. BW's new
Pander Meter rates the latest ploys:

PANDER POINTS

85 **PRESIDENT BUSH**

The White House
miraculously finds billions of gal-
lons of water for drought-plagued
California farmers. And to help
Bush in Michigan, there's a
scheme that encourages companies
desiring pollution credits to pay
owners of old cars up to \$1,000 for
their rusting heaps

70 **PAT BUCHANAN**

Campaigning in Geor-
gia, Buchanan visits a cemetery to
rediscover his great-grandfather's
ties to the Confederacy. Now, how
about a mint julep in every glass?

78 **BILL CLINTON**

Swinging through
Florida, Clinton promises medical
care to seniors and increased
federal aid to inner-city blacks,
then bashes Cuba's Fidel Castro

55 **PAUL TSONGAS**

Campaigning in Dallas,
Tsongas suddenly an-
nounces his support for a Senate
proposal to extend tax breaks to
oil-and-gas drillers. Yes, Virginia,
there is a Santa Claus

50 **JERRY BROWN**

Brown insinuates that a
photo of Clinton with black
prisoners in the background was
a Willie Horton-type racial appeal.
A blatant bid for black votes



CLINTON: 'IF WE REDUCE DEFENSE RESEARCH AND DEVELOPMENT, WE CAN AT A MINIMUM INCREASE CIVILIAN R&D BY THAT MUCH'



gan Democrats into a coalition with minorities, the elderly, and other traditional groups of voters.

Q In South Florida's Jewish enclaves, you pledged to tilt U.S. policy toward Israel. In Miami's Liberty City ghetto, you spoke of more aid for cities. In central Florida, you promised that you would retrain defense workers. Is this the "new politics" of your Democratic Leadership Council—or as Tsongas charges, old-fashioned pandering?

A You can say I've said that there, but you can't find any place where I've said anything different. I also went to Wall Street and said, "I'm going to raise your taxes and give the middle class a break," and got groans at my own fund-raiser. If you want to look at pandering, you've got to look at who has changed positions.

A TALK WITH BILL CLINTON: 'I WANT TO GENERATE A LOT OF MILLIONAIRES'

The Democratic front-runner on taxes, donations, and economic policy



You can forgive Bill Clinton for a little excess exuberance. As he stormed into sunny Kissimmee, Fla., for the ritual photo

opportunity at an exhibition baseball game, the Arkansas governor wound up—and let fly an errant pitch that had photographers hooting. That was about the only miscue Clinton made on his way to a crushing sweep of seven Southern and border states on Mar. 10. Washington Bureau Chief Lee Walczak caught up with Clinton on Mar. 9 during a hectic day of Florida campaigning and talked with the soon-to-be Democratic front-runner about his views on, among other things, rival Paul Tsongas, the economy, executive pay, and the gas tax.

Q Initially, you stressed your moderate credentials. But now, most of your backing is coming from such traditional constituencies as blacks, working-class voters, and the elderly. Is that

why you now sound more traditional themes?

A No, because I haven't really changed my message.... You have to listen to what I'm saying more. Tsongas got himself positioned with upscale voters by saying: "I'm for [cutting taxes on] capital gains and against a middle-class tax cut."... [But] I have proved that you can bring back a lot of blue-collar Rea-

Q You blast Tsongas for being too cozy with Wall Street, yet you've raised large amounts of money from investment bankers (table). How can you take their money and attack them?

A Because I do it when I'm there. That's the difference between me and [former California Governor] Jerry Brown. He thinks if you give money you're bad for America.

Q Could those executives be writing checks because they think your anti-Wall Street stance is only a pose?

A No, no.... People who work on Wall Street are good citizens who want their country to change.... I want to generate a lot of millionaires, and I want to do it with an economic policy that is focused on rebuilding our country.

Q Would you use the tax code to tie executive compensation to gains in productivity?

A I basically buy the argument that [author] Graef Crystal makes: You ought to have rea-

NOT FRIENDS, JUST DONORS

Democratic Presidential contender Bill Clinton lampoons former Massachusetts Senator Paul Tsongas as the best friend Wall Street has ever had. Yet the Arkansas governor has himself raked in hundreds of thousands of dollars from Wall Streeters, including those listed below

HERBERT A. ALLEN	CEO, Allen & Co.	\$1,000
ROGER C. ALTMAN	Partner, Blackstone Group	1,000
ROBERT CARSWELL	Partner, Shearman & Sterling	1,000
LEON G. COOPERMAN	Partner, Goldman Sachs	1,000
JEROME KOHLBERG JR.	Principal, Kohlberg & Co.	1,000
LIONEL I. PINCUS	Principal, E.M. Warburg Pincus	500
ALAN PATRICOF	Venture capitalist	1,000
ROBERT E. RUBIN	Partner, Goldman Sachs	1,000

DATA: FEDERAL ELECTION COMMISSION

tives for executive compensation
on long-term growth of the com-
That's better than just a capped
on deductions.

e New York Times alleges that
and your wife Hillary were busi-
partners with a troubled Arkan-
investor and notes that when your
er's S&L was under fire from reg-
ers, he hired Hillary to represent
Was this proper?

ok at the facts, which were not in
Times story.... When I made this
estate investment, it was four years
the man was in the S&L business.
as before I became governor....
Times alleged—falsely—that I was
at any financial risk. We were at
ificant financial risk and lost a good
of money. When I got back in the
rnor's office in 1983, he was then in
&L business. At that point, there
no option to get out of the deal. It
d have raised more questions if
body bought me out when I was
g money.

retrospect, would you do it
?

, because I lost money.

ou blast Tsongas for backing a
er gas tax. Isn't that the kind of
umption levy the DLC advocates?

e says we ought to raise this tax 3¢
a year for a decade and force peo-
to buy new cars. If you're from Bos-
nd can ride the T, that's fine. But if
e going to raise the gas tax, it
d be much more modest.

the South, you've left the impres-
that President Clinton would re-
displaced defense-industry work-
What's to keep this "defense
ersion" program from turning
a costly fiasco, like the Trade Ad-
ment Assistance program of the
1970s?

ade Adjustment Assistance was ba-
y designed to help retrain workers
reas where the jobs were growing.
is more of an investment strategy
ake sure America is investing in
technologies.... There are several
s...we should do. No.1, if we
acknowledge that we're deficient
mmercial research and development
pared with many of our competitors,
an say that if we reduce defense
we can at a minimum increase civil-
R&D dollar-for-dollar by that
a.... We need to take ideas and
e them to market in America instead
verseas.

PERFECT TIMING FOR SICK BANKS

Critics say Bush's regulators won't let one sink in an election year

Last year, the Bush Administration fought on Capitol Hill for a reform bill aimed at tearing down laws that shelter the banking industry from market forces. This year, the Administration has done a surprising and some say perilous about-face. Indeed, Bush-appointed banking regulators are doing their darnedest to keep banks open—and lending—even when the institutions are close to collapse.

What's changed? Some lawmakers and banking experts suspect it's the looming Presidential election. With George Bush's halting stewardship of

York-based Emigrant Savings Bank to ease its takeover of Dollar Dry Dock Bank in White Plains, N. Y.

Now the agency is pressing for yet another bailout, this time for the failing First City Bancorp of Texas. The government, seeking \$400 million from prospective buyers, will guarantee repayment on an undisclosed share of the Houston bank's loans. First City was first propped up by regulators in 1987 with a \$1 billion capital infusion.

STRATEGIES TO AVOID BIG BANK FAILURES

FIRST CITY BANCORP OF TEXAS

The Federal Deposit Insurance Corp., seeking private investors for the Houston bank, is willing to guarantee bad loans

CROSSLAND SAVINGS

The FDIC in late January took over the Brooklyn-based thrift and has set aside \$1.2 billion to fix up Crossland for sale

GLENFED

The Office of Thrift Supervision is quietly scouting for a buyer for the Glendale (Calif.) thrift, one of several capital-starved California S&Ls

DATA BW

the economy a top campaign issue, Administration officials are hardly in the mood for a big bank failure that would jolt consumer confidence, increase unemployment, and shrink available credit. Instead, keeping ailing banks on life-support, a policy known as forbearance, could avert the politically ticklish possibility of a bank collapse in a key state.

CASH SWEETENER. The new regulatory policy first became apparent in January, when the Federal Deposit Insurance Corp. took direct control of Crossland Savings FSB in Brooklyn, N. Y. (table). Regulators claimed that the two bids they received were far too low. It was cheaper, the FDIC argued, to take control of Crossland and try to sell it later. Then in February the agency chipped in \$34 million to buy preferred stock in New



Nor will the policy of forbearance end there if regulators have their way. On Mar. 25, banking regulators will hold a public hearing on proposals that would allow the government to pay shareholders in troubled thrifts a sweetener to accept a shotgun marriage with a healthy savings and loan. "If it's done right, we could save significant amounts of money," says Office of Thrift Supervision Director Timothy Ryan. Analysts speculate that thrifts in California, a big electoral prize, would be the first recipients of such aid. Several, such as GlenFed Inc. in Glendale and CalFed Inc. in Los Angeles, need fresh capital.

Regulators insist that their recent ac-

tions are designed to protect taxpayers, who pay the tab for cleaning up the country's battered banks and thrifts. Officials hope to revive institutions for later resale to private investors at higher prices. "The trick is to figure out which ones are fatally wounded," concedes FDIC Chairman William Taylor.

DEJA VU. Take Crossland. Regulators note that Republic National Bank, the leading bidder, had offered just \$17 million for Crossland's good loans and \$5.5 billion in deposits. The FDIC instead is setting aside \$1.2 billion to shore up Crossland's capital and reserve for loan losses. The FDIC predicts Crossland can ultimately be sold for \$437 million, even

though many analysts believe the franchise has no real value. Says investment banker Gerard Smith of Salomon Brothers Inc.: "The market has said there is no need for Crossland."

The regulatory actions have met a hail of criticism on Capitol Hill. "I thought that capitalism meant that stockholders and management assume the risk—not the taxpayers," House Banking Committee Chairman Henry B. Gonzalez (D-Tex.) told regulators at a Feb. 25 hearing. Even those who favor early government assistance worry about this strategy. It puts regulators "in the position of picking winners and losers," notes a senior Federal Reserve staffer.

Even more worrisome to lawmakers is that the government's lenient approach is frighteningly similar to Washington's disastrous thrift experience. In the 1980s, weak institutions were kept alive through accounting gimmickry and other means that postponed their day of reckoning—and vastly inflated the cost of the S&L cleanup.

Yet with a Presidential campaign in full cry, an economy struggling to recover, and some very large problem banks teetering on the edge, regulators are apt to forget their history lessons—and roll the regulatory dice one more time.

By Tim Smart, with Mike McNamee and Dean Foust in Washington

Commentary/by William C. Symonds

THE U.S. CAN'T AFFORD TO NICKEL-AND-DIME CANADA

Lots of people agree that there ought to be a North American Free Trade Agreement. The pact would do wonders for the region's ability to compete with Japan and Europe by removing most restrictions on goods and services moving between the U.S., Canada, and Mexico. The result? The world's largest common market, a North America Inc. with a \$6 trillion gross regional product.

But now, just as free-trade talks with Mexico have brought the pact within reach, Washington seems to be losing the spirit needed to make the agreement work. In recent weeks, the U.S. has instigated some nasty trade battles with Canada, its largest trading partner. The moves reflect the rising protectionist fires in Washington, fueled by the Presidential campaign and Pat Buchanan's unrelenting "America First" message. But the tension also is jeopardizing Canadian support for the 1988 U.S.-Canada Free Trade Agreement—the cornerstone of any North American free-trade plan.

'PURE POLITICS.' The latest dispute—over Canada's softwood lumber exports to the U.S.—illustrates just how sharply U.S.-Canada trade relations have deteriorated. On Mar. 6, the U.S. Commerce Dept. issued a preliminary finding that Canada subsidizes its lumber exports and required Canadian producers to post a bond to cover the 14.48% subsidy. That

amounts to some \$350 million a year.

Canadians are furious. Even Prime Minister Brian Mulroney, a staunch free-trade supporter, called it "vexatious harassment" stemming from "pure politics." On Mar. 10, he called a Cabinet meeting to discuss retaliation.

What makes this so unfortunate is that the U.S. case is so weak. Canada's share of the U.S. lumber market actually has fallen from one-third to 27% since 1986, when the U.S. last

Honda Civics made in 1989 and 1990 at Honda Canada's plant in Alliston, Ont., don't have the 50% North American content required by the free-trade pact. That decision meant the cars are subject to a retroactive 2.5% duty.

NO-GAINER. Americans are justifiably angry about their huge trade deficit with Japan. But if the U.S. was swinging at Japan, the punch landed on Canada. The Honda ruling was issued despite a dispute over how to define content: Canada argues the Civics easily qualify for duty-free treatment.

Washington's message to Honda and other Japanese investors is that it is safer to invest in the U.S. than in Canada. And that violates Canada's implicit understanding that it is entitled to a share of foreign investment in North America Inc.

Little wonder, then, that Canada is challenging both of these rulings. Canadians believe they will prevail. But the process could take months, and the political damage is already done. Most Canadians avidly follow trade issues, and most now believe it's time to renegotiate or repudiate the free-trade pact.

By going after Canada on cases such as Honda and lumber, the U.S. stands to lose far more than it can gain. If it wants to regain some of its enormous losses to Japan, Washington needs Canada and Mexico as strong partners. If it's smart, the U.S. will start treating them accordingly.



CANADIANS ARE FURIOUS ABOUT THE U.S. ATTACK ON LUMBER EXPORTS

challenged Canadian timber subsidies and Canada agreed to balance the scales with new taxes and charges. On this go-around, Commerce is primarily challenging British Columbia's decades-old policy of prohibiting raw log exports. But the same policy is in place in the U.S.'s Pacific Northwest—just across the border.

The lumber decision follows another questionable jab at Canada, the U.S. Customs Service's Mar. 2 ruling that



IN MUSIC BROUGHT \$880 MILLION IN CASH, AND \$540 MILLION WENT TO BRANSON

RICHARD BRANSON TAKES THE RUNWAYS

ing his music group will help his Virgin Air battle British Airways

Too many entrepreneurs have gone down because they were not prepared to cash in their chips at right time," says Richard Branson. Mar. 6, the irrepressible 41-year-old took his own advice—and hit the jackpot by selling his Virgin Music group to Thorn EMI PLC. The price: a staggering \$880 million in cash, \$540 million of it for Branson. Hardly the type to take to his tropical island (he owns Branson) is bubbling with ideas for riding the windfall. His top priority: Virgin Atlantic Airways Ltd.

Branson now calls the scrappy little carrier his "first love" and vows to "put the time, commitment, and whatever it takes to make it work." With more than \$500 million in his pocket, Branson has some promise. Founded by Branson in 1984 with one 747 flying from London to Newark, Virgin has grown to a \$500 million carrier. The course hasn't been smooth: Buffeted by the recession, the airline lost \$5.2 million before taxes in fiscal 1991, ended July 31. **GOING IN.** Nonetheless, Branson has mapped out a plan to double his fleet to 230 planes by 1995, and to add a half-dozen new routes, including London to Johannesburg, Chicago, and San Francisco. To fund the expansion, Branson, who owns 90% of Virgin Atlantic, had been seeking an investor to put up \$95 million for a 20% stake. Now, he may use the Thorn money instead. His wind-

fall could also go toward a few used 747s now available at bargain prices.

With the Thorn money, Branson could turn Virgin into more than a mere annoyance for British Airways PLC, its \$8.6 billion archrival. "BA can no longer hope that Virgin will simply disappear," says Sir Michael Bishop, chairman of British Midland Airways Ltd. Branson intends to limit Virgin to just 12 routes, but those accounts for the lion's share of BA's profits. He figures the London-Johannesburg run alone generally brings BA operating profits of \$55 million and says he plans to move in on that route this year. BA is expected to post pretax prof-



its of about \$500 million in fiscal 1992.

In designing Virgin, Branson drew lessons from past flops. He figures that People Express Airlines Inc. and Sir Freddie Laker's Skytrain, for example, erred by courting the unprofitable back-packer set. When major carriers cut prices, the upstarts were left with a similarly priced product and poorer service. Virgin's motto, if it had one, might be: "superior service at competitive prices." Economy fares are similar to rivals'. But Virgin offers seat-back TV sets, toiletry kits, and free headsets.

The key to Virgin's success, though, has been its Upper Class service. The price is comparable to BA's business class, but Upper Class offers near-first-class comforts. Seats are the full-sleeper type used in first class. Drinks are free. So is limo service. And on some flights, free neck massages are offered.

Upper Class has won Virgin many plaudits. *Executive Travel*, a British magazine, hands out a prestigious set of awards every year based on a passenger survey. Winners have included Singapore Airlines and BA. But Virgin has won "Best Airline" two years running, and this year swept most of the top categories. BA won only such uninspiring awards as "Best In-Flight Magazine."

NASTY RUMORS. The rivalry between the two airlines has built to a fever pitch. Last year, the British government riled BA when it took four of its landing slots at Tokyo's Narita Airport and gave them to Virgin. Since then, Branson has charged BA with waging a dirty-tricks campaign to discredit his carrier. He alleges that a BA public relations adviser promulgated rumors that Virgin had weak finances and that BA tried to pirate Virgin passengers at the airport. BA's aim, says Branson: "To get rid of a competitor." BA declines to comment. But Branson vows legal action, perhaps an antitrust suit, unless BA apologizes.

Virgin's expansion is hardly risk-free. Other carriers have started as niche players, become dazzled by expansion, and crashed. Says Branson: "We're not planning to get delusions of grandeur." That's wise, considering that Virgin faces a dearth of available slots at busy Heathrow Airport. And U.S. competition has gotten tougher. Virgin prospered in the late 1980s against ailing U.S. carriers. But now, American Airlines, United Air Lines, and Delta Air Lines have expanded, adding routes between London and the U.S.

Nonetheless, Branson shows no worry. He's hatching plans for a third class of service to be launched this spring. "It'll be business-class service at economy prices," he says. If it flies, a whole new crowd may become fans of Branson's enterprising little airline.

By Mark Maremont in London

SHAKE, RATTLE, AND ROLL HEADS

Paramount President Stanley Jaffe swings a mean ax, but he gets results

For an executive who jets in just three times a month, Stanley R. Jaffe gets the royal treatment at Paramount Pictures Corp. Workers at the studio's 61-acre lot are putting the finishing touches on his renovated suite of offices. Outside the building sits the ultimate symbol of Hollywood power: a white Yamaha golf cart with Jaffe's name stenciled on the side. Only two other biggies get their own carts: superstar Eddie Murphy and studio chief Brandon Tartikoff.

Jaffe's cart may get scant mileage, but the former movie producer has swirled like a whirlwind through the studio and its parent, Paramount Communications Inc. Chairman Martin S. Davis named Jaffe president of parent Paramount a year ago. Working out of its New York headquarters, he already has engineered a dramatic shakeup at the \$3.9 billion entertainment and publishing giant (table). "The place needed fixing, and that's just what he did," says money manager Mario J. Gabelli, whose fund is Paramount's largest shareholder.

No question, Paramount is again living up to its lofty moniker. After a year of such big-budget flops as *Godfather Part III*, Paramount is cleaning up with *The Addams Family* and *Wayne's World*. Its long-suffering sports teams, basketball's New York Knicks and hockey's New York Rangers, are hot, and they're packing the house at Paramount's own Madison Square Garden.

HOUSECLEANING. Wall Street is cheering, too: After slipping for most of the past 12 months, Paramount stock is trading around 47, its 52-week high. Even better, on Mar. 10, the company reported \$18.4 million in first-quarter earnings—reversing last year's \$7.3 million loss. That was good enough to boost its first-quarter cash dividend by 14%. Now, Lisbeth R. Barron, a media analyst at S.G. Warburg & Co., predicts 1992 profits will jump almost 75%.

True to Hollywood, some of Paramount's current success is plain good luck. But Gabelli and other major investors also applaud Jaffe

for cleaning up a studio that was spinning out of control. Since the hard-edged New York native arrived, most of the studio's top managers have left. So has the head of Madison Square Garden.

Davis didn't just hire a hatchet man though. Jaffe, 51, produced *Fatal Attraction*, and his father ran Columbia Pictures. With his feel for Hollywood, Jaffe smoothed out a contract dispute with Eddie Murphy, agreeing to pay him \$12 million each for four films. This summer, Murphy stars in *Boomerang*, his first Paramount film in two years.

Now, Jaffe is turning over most of the studio's management to Tartikoff, the former NBC programming whiz who spent much of his first year focusing on TV production. Under orders to rein in film costs, Tartikoff so far has a mixed record: He hit the jackpot with the \$1 million *Wayne's World* but flopped with last year's low-budget *All I Want for Christmas*. But Jaffe also backed Tartikoff when he paid Harrison Ford \$9 million to star in the upcoming Tom Clancy thriller *Patriot Games*.

TIDY GARDEN. Moreover, the company spent \$200 million to refurbish Madison Square Garden. And Jaffe paid \$6 million to lure former Los Angeles Lakers coach Pat Riley out of retirement to lead the Knicks, plus \$33 million to extend star Patrick Ewing's contract for six years.

Not everything bodes well for Paramount: The studio, for example,

PARAMOUNT'S PANORAMA



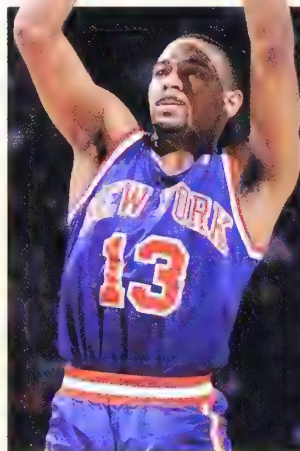
PARAMOUNT PICTURES

1991 revenues \$1.2 billion. Box-office share fell from 15% in 1990 to 12% in 1991. But studio is enjoying new hits, including *The Addams Family* and *Wayne's World*. Coming up: *Patriot Games*, with Harrison Ford



PARAMOUNT TELEVISION

1991 revenues \$593 million. Former NBC Entertainment chief Brandon Tartikoff's unit hurt by falling syndication revenues and low ad rates for *The Arsenio Hall Show*. But *Star Trek: The Next Generation* is hot



MADISON SQUARE GARDEN

1991 revenues \$230 million. The Knicks and the Rangers are both leading their divisions, but Paramount lost money last year because of a massive renovation of the Garden and skyrocketing Knicks payroll

SEIZE THE MOMENT



AMERICA'S CHALLENGE IN A ONE-SUPERPOWER WORLD

RICHARD NIXON

SIMON & SCHUSTER

1991 revenues \$1.5 billion. After a 1989 overhaul resulting in \$140 million in write-downs, the company has reshuffled management. Now it's pushing several titles, such as *Den of Thieves* and Nixon's *Seize the Moment*

DATA: BW, COMPANY REPORTS, L. H. ALTON & CO

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ple, has been slow lining up major new film projects and has only one Christmas offering in the works. And while its losses narrowed, Simon & Schuster, the company's book publisher, still posted a \$29.7 million first-quarter loss. Despite much ballyhoo, the publisher lost a bundle on former President Ronald Reagan's memoirs. In the future, its educational arm figures to be hurt by falling

outlays for textbooks in some states.

With nearly \$1.6 billion in cash, Paramount is uniquely positioned to diversify. The company lately has toyed with deals for such record companies as Virgin and Geffen Records. But it has only bought some lower-priced TV stations and expanded its computer book publishing business. Yet Davis himself hints that some deals could happen soon: "We

have our own timetable," he says. "We will be adding more assets."

As for Jaffe, there are rumblings that Davis, who recently turned 64, may have found a successor. Both men still have five years on their contracts—but with the company on the mend, Davis may be thinking of leaving sooner. Not!

By Ronald Grover in Los Angeles, with Mark Landler in New York

EXECUTIVE SUITE

BRAWL IN THE FAMILY AT JOHNSON PRODUCTS

In the midst of a turnaround, a feud roils the hair-care company

Talk about sibling rivalry. Since joining the family business in early 1991, Joan M. Johnson has clashed with her brother Eric G. Johnson over her role at Johnson Products Co. Vainly demanding a much bigger say in company decisions, the newly minted MBA chafed at her job as head of market research while her 40-year-old brother called the shots as president and chief executive of the Chicago hair-products manufacturer.

Now, she's getting her way: In a surprise Mar. 9 announcement, Eric resigned. And his 27-year-old sister is poised to take on much more responsibility at the \$38 million outfit, one of the largest black-owned companies in the U.S. She'll be one of four executives in a newly created office of the president. Joan and Eric's mother, Joan B. Johnson, who owns 61% of the company, will continue as chairman.

The reason for the abrupt management change? "Joanie knows how to get to her mother," says her father and company founder George E. Johnson, who resigned as chairman and gave up his stake in Johnson Products as part of a divorce settlement with Joan in 1989. Although a written statement from the company says Eric left "to pursue personal business interests," Johnson insists that his son was ousted: "Whatever you're looking at is the will of the chairman." Joan Johnson, her daughter Joan, her son Eric, and company executives did not return repeated calls seeking comment.

Whatever the reason behind it, Eric Johnson's departure clouds the company's

outlook. During his two and a half years as CEO, Johnson executed a sharp turnaround at the struggling manufacturer, which had posted four annual losses since 1983. He slashed production costs, pumped up Johnson Products' presence in beauty salons as well as in the Caribbean, and acquired several well-respected product lines. The leaner organization allowed Johnson to undercut rivals' prices with such brands as Ultra Sheen and Gentle Treatment without squeezing profit margins. "I've seen him definitely increase his shelf [display] and market share, but he has been very profitable in so doing," says Comer Cottrell, chairman of competitor Pro-Line Corp.

SOARING SALES. A look at the books supports Cottrell's view. Earnings in fiscal 1991, ended Aug. 31, grew 23%, to \$3.2 million, on a sales increase of 14%, to \$38.4 million, says Timothy Ebright, a portfolio manager for Eagle Asset Management, which holds a 3.25% stake in

Johnson Products. In the first quarter of fiscal 1992, sales rose 19% from a year earlier, to \$8.6 million, and net earnings were up 27.5%, to \$714,000. Last December, the company declared an annual dividend of 28¢ a share, the first since 1980. And the stock has taken off: Since falling as low as 4% in late 1990, it has more than quadrupled in value. On Mar. 9, the stock closed at 19½.

Yet the company still has a long way to go before regaining its dominance of the \$1.5 billion black health-and-beauty care market. Sales at No. 1 Soft Sheen Products Co., a crosstown rival, are more than double those of Johnson Products. The long slide at Johnson Products began in 1975, when the Federal Trade Commission forced manufacturers to put strongly worded warning labels on products containing lye. Only after competitors had made serious inroads with no-lye products did Johnson formulate its own versions. The company continued to respond only slowly to market trends until Eric took charge.

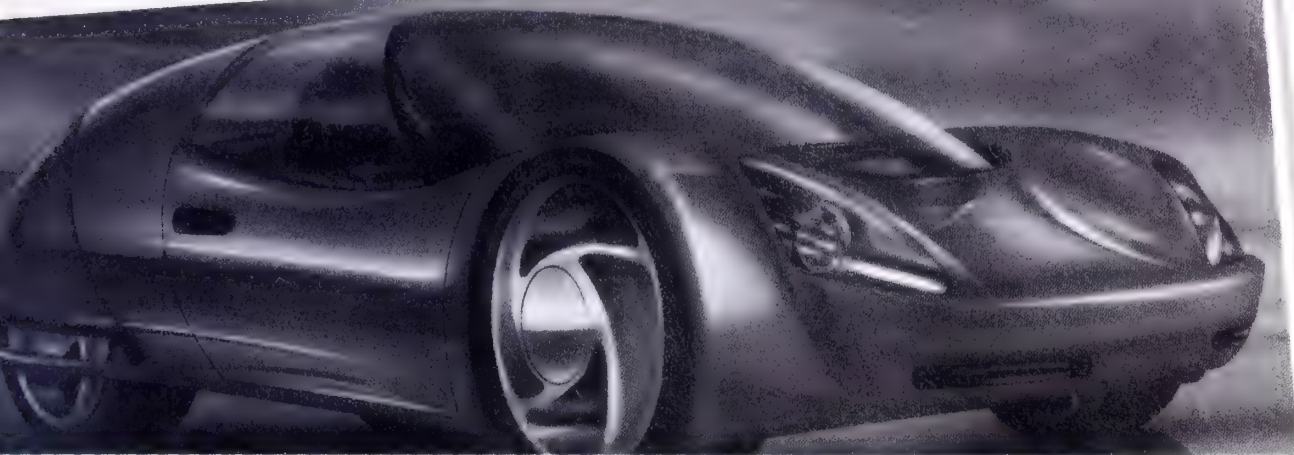
The question now is whether Johnson Products can continue its comeback without Eric. Not surprisingly, George Johnson, who's still a consultant to his old company, characterizes the four-person office of the president as "a joke. But people with less of an emotional investment in the company share his doubts. Says Ebright: "I will keep a very wary eye on the company over the next six months." Adds Cottrell: "Frankly, I think the timing may have been bad."

Worse than the timing, perhaps, are the hard feelings. Cottrell says the Johnsons had seemed "very happy" when they shared his box seat at Texas Stadium in the fall of 1990. They had come to watch Joanie's husband, Dennis McKinnon, play for the Dallas Cowboys. McKinnon and Johnson are now in the midst of a divorce. Even if the company prospers after this late management shakeup, the Johnson family may have fractured for good.

By Lois Therrien in Chicago



ERIC JOHNSON IS OUT. THE COMPANY'S COMEBACK IS IN DOUBT



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SPACE

DAN GOLDIN'S FINAL FRONTIER?

NASA's new boss has to hone his political skills—pronto

Don't envy Daniel S. Goldin. Sure, President Bush plucked the 51-year-old TRW Inc. executive out of obscurity on Mar. 11 and nominated him as chief of NASA—the highest-profile job in the aerospace business. But after Goldin's expected Senate confirmation, he will take on what is also one of the toughest jobs in Washington.

Goldin is stepping into the middle of a war for control of the space program, pitting NASA against the President's National Space Council, a Cabinet-level group chaired by Vice-President Dan Quayle. The battle last month cost Gol-

din's predecessor, former astronaut Richard H. Truly, his job. Now, Goldin also must defend Truly's \$14.9 billion budget to congressional critics who plan to slash NASA's funding. "There is simply not enough money for NASA to carry out all of its ambitious programs," says Senator Albert Gore (D-Tenn.), chairman of the Senate space subcommittee.

Simultaneously, Goldin will have to deal with congressional demands that NASA take a hard look at used Soviet space equipment—now available at a discount. "I'm studying it right now," Goldin says of the Soviet fire sale.

OLD HAND. There's no doubt Goldin has the technical background for his new job. A 30-year aerospace veteran, Goldin launched his career at NASA's Lewis Research Center in Cleveland. Then he moved to TRW, where he spent the past



GOLDIN: UP AGAINST CONGRESS AND QUAYLE

25 years, rising to the post of general manager of the TRW Space & Technology Group in Redondo Beach, Calif. The unit has produced dozens of big civil and military space systems, including NASA's Advanced X-Ray Astrophysics Facility (AXAF), a \$2 billion orbiting lab to be launched in 1999.

It's Goldin's political acumen that will be tested,

though. Under Quayle's activist leadership, the National Space Council is injecting itself ever more deeply into internal NASA affairs. Currently, for instance, the NSC wants to set up a new cadre of procurement officials that in some instances would report directly to the Vice-President, bypassing the NASA administrator. Good thing Goldin is an avid bicyclist: He'll have to do plenty of fast pedaling on the road he's now traveling.

By Seth Payne in Washington

TELECOMMUNICATIONS

MCI'S WINNING PITCH

Its Friends & Family plan has drawn millions of new customers

Linda Watkins-Ovbokhan knows people all over the U.S. So when MCI Communications Corp. unveiled its "Friends & Family" program a year ago, she became an unofficial saleswoman for the No. 2 long-distance company. The lure? MCI's 20% discount on any call to another participant in a circle of up to 12 customers. The 36-year-old Chelsea (Mass.) resident converted four people from American Telephone & Telegraph Co. for her circle—including her reluctant mother. "I had to talk to her about it for a month," says Watkins-Ovbokhan. "Believe me, it took convincing."

MCI has long intimated that there are thousands of such unpaid supersellers around the country. Now, it's offering proof. Of the estimated 7.5 million customers who will have signed up with Friends & Family by the end of March, a stunning 5 million are new to MCI, claims Senior Vice-President Timothy F. Price.

After accounting for losses elsewhere, MCI says it has gained a net 2.5 million subscribers and boosted its share of the \$27.5 billion residential market by nearly two percentage points, to 16%. That's half a billion bucks in fresh revenue. Price says that Friends & Family cus-



UNPAID SALESWOMAN: WATKINS-OVBOKHAN GOT FOUR OTHERS TO SWITCH TO MCI FROM AT&T

tomers call 25% more than they used to, at least initially, and are 20% less likely to drop MCI. He won't comment on Friends & Family's profitability, which has been weighed down by \$100 million in advertising and by the 20% rate cuts. But Joel Gross, an analyst at Donaldson, Lufkin & Jenrette Securities Corp., predicts it will boost profits in 1992's second half, thanks to increased volume.

NO MATCH. MCI's rivals are fumbling for a response. No. 3 Sprint Corp. is aiming a major campaign at the residential market this spring. As for AT&T, it began TV ads last month that snipe: "AT&T offers you savings, and you don't have to work for them." What AT&T can't do, though, is match MCI's offering. That's because it relies on local phone companies to cal-

culate its residential bills, so it doesn't have centralized records of when or where an AT&T customer has called another.

AT&T might shy away from a Friends & Family lookalike anyway. Why? Because it holds 62% of the residential market, and those customers are calling other AT&T customers about 62% of the time. Discounting those calls would mean a huge revenue hit. MCI, with its smaller residential share, can discount calls to other MCI customers without suffering such a big penalty. "This is where we call corporate jujitsu," says MCI's Price. "You look for your opponent's weakness and home in on it." Friends & Family may be earning MCI a black belt in marketing.

By Mark Lewyn in Washington

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The Legend is, after all, a true performance car, generously endowed with luxury appointments and safety features. While the spirited personality of the Vigor is only equaled by the refinement of its interior.

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EDITED BY DEIDRE A. DEPKE

UNCLE SAM'S BIGGEST HANDOUTS

Former President Nixon has blasted the Bush Administration for its paltry financial assistance to the former Soviet republics. Stripping away some \$3.75 billion in food credits, which have to be paid back, the U.S. plans to spend roughly \$1.5 billion in 1992 on Soviet aid. Here's what it sent smaller countries last year

TOTAL ECONOMIC AND MILITARY AID IN 1991

ISRAEL	\$3,000 MILLION
EGYPT	\$2,660 MILLION
PHILIPPINES	\$565 MILLION
TURKEY	\$553 MILLION
PAKISTAN	\$246 MILLION

DATA: HOUSE FOREIGN AFFAIRS COMMITTEE

A TUITION BREAK FROM SAVINGS BONDS?

► Saving up for your kid's college education? You may be in line for an expanded tax break. One provision in the Senate's proposed tax bill would make earnings on Series EE U.S. Savings Bonds free of federal taxes, so long as the interest is used to pay educational expenses. Now, Series EE interest is excluded only for families earning less than \$90,000, and only when applied to the immediate family's schooling. That means grandparents, for instance, can't use the money to educate a grandchild. The break is no sure bet: President Bush may veto the bill.

IBM GETS DEEPER INTO THE CLONE BUSINESS

► It's no secret that IBM has big troubles in the PC market. Its sales last year fell 11.8%, contributing to the company's \$564 million loss. And competing PC makers have shaved profit margins paper-thin. To come back, IBM has several

new marketing approaches in the works. In Europe, it's setting up a subsidiary to resell Asian-made PC clones, which yield fatter margins than those IBM makes itself. IBM actually has been reselling PC clones in Asia since 1991, through a Singapore-based joint venture. Back home, meanwhile, the company is set on Mar. 18 to unveil a new 800-number "technical support" line that IBM PC customers can call for free advice about either hardware or software. Most such services carry a charge.

HAMLET, PRINCE OF BULLET TRAINS

► Faced with declining Pentagon budgets, defense giant McDonnell Douglas wants to diversify from fighter aircraft and missiles into bullets—bullet trains, that is. Top defense gun McDonnell is considering developing what it calls a Highspeed Aero-assisted Magnetic Levitation Elevated Transport—HAMLET, for short. The trains could ferry passengers between cities or airports at up to 300 miles an hour. The high-tech trains are just one of several new commercial projects McDonnell is considering, including developing a sophisticated paint removal system and finding new uses for the composite materials used in aircraft skins. McDonnell's combat

LET'S LEVITATE THAT BOTTOM LINE

What would Lenin say? And what about Lennon? Maharishi Mahesh Yogi, advocate of Transcendental Meditation and guru to the Beatles, on Mar. 6 opened a business school in the heart of Moscow. Called Maharishi Vedic University, the school's aim is to teach budding industrialists His Holiness' theory of Vedic science, which emphasizes mind-clearing meditation and reliance on spontaneity. Typical courses at Moscow's Vedic University and its sister schools in Iowa, The Netherlands, and India? The Science of Creative Intelligence and Yogic Flying—a class in levitation. The Maharishi, who still wears his white robe and his beard, says his graduates will make better managers because their minds will be "wide-angle lenses which incorporate a wider horizon and bigger reality." That apparently sounds great to 300 Muscovites, who have paid the tuition of 900 rubles—the equivalent of one month's salary. Ommmm.



aircraft unit has cut 8,000 workers in the past 18 months. Another 3,000 employees will run out of work later this year as McDonnell's F-15 fighter contract nears completion.

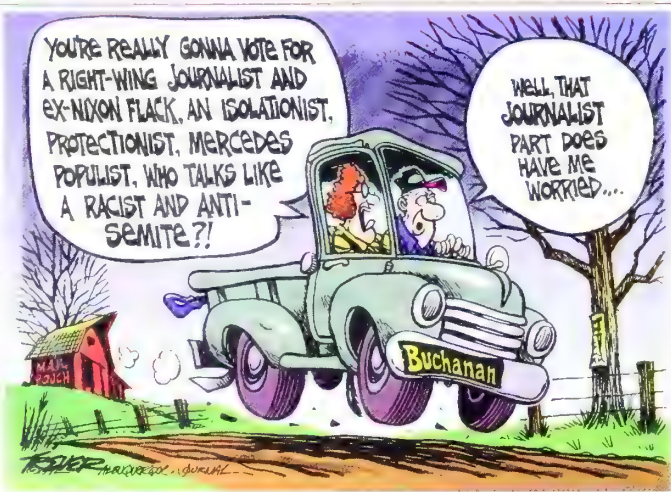
A NEW DEALER AT BALLY'S

► Bally Manufacturing, now in Chapter 11, has a new shareholder. On Mar. 10, First Jersey Securities founder Robert E. Brennan told the SEC he had acquired 6.8% of Bally. His \$17.8 million buy makes him the casino company's top shareholder. Brennan,

who says he since has bought 200,000 more shares plans to keep buying for "investment purposes," and says he has no plans to play an "adversarial role." In 1984, First Jersey settled fraud charges with the SEC without admitting wrongdoing. Brennan settled associated civil charges. Meanwhile, Bally Chairman Arthur Goldberg last week sold 850,000 Bally shares, reducing his stake to 2.5%. Goldberg says there is no tie between his sale and Brennan's buys. "We welcome all investors," he says.

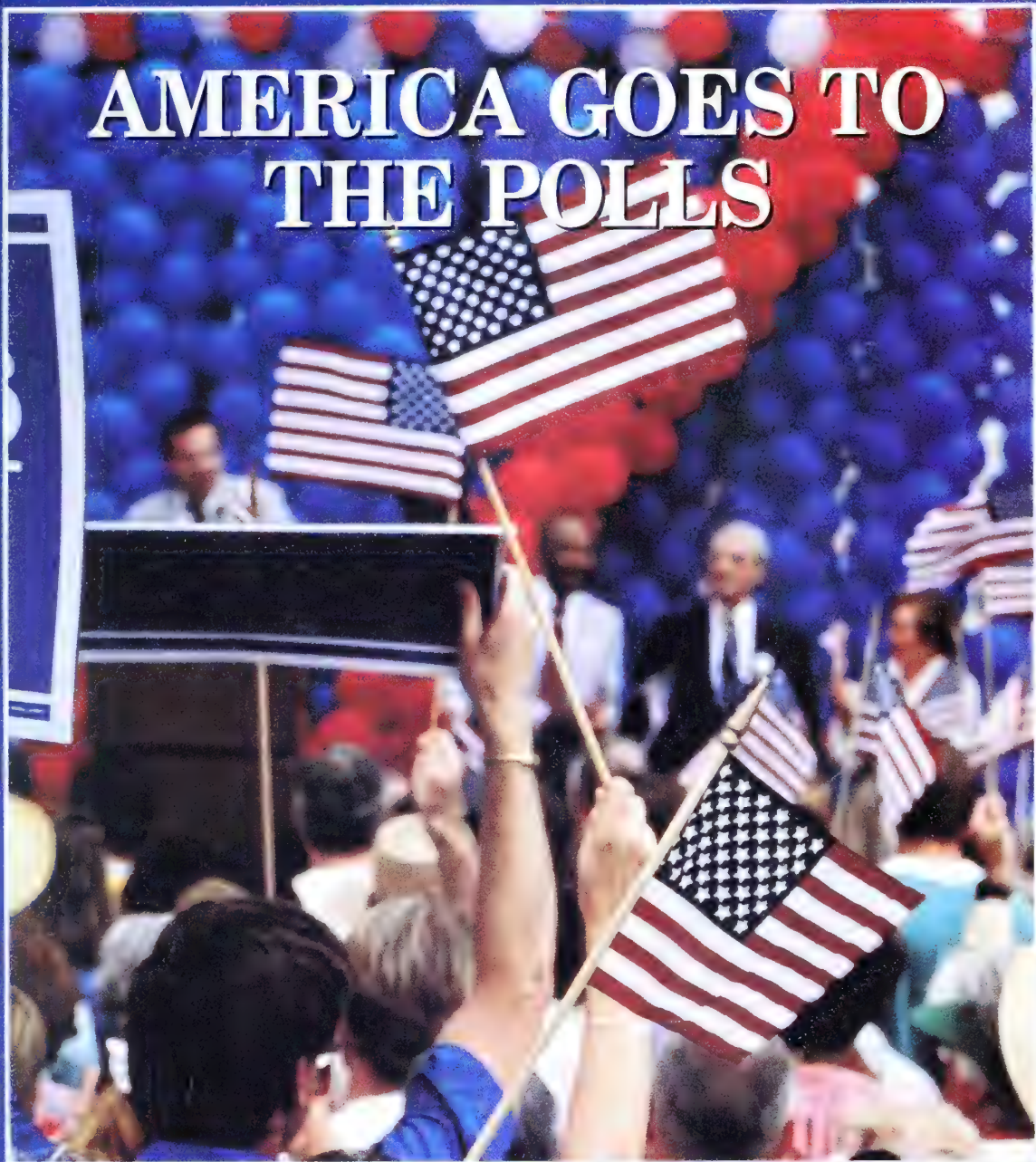
DID CANTOR BUY T-BILLS ON THE SLY?

► The Treasury Dept.'s non-competitive bidding system lets individuals buy up to \$5 million in Treasury bills, notes, and bonds at the same average price that Wall Street professionals pay. But one firm may have subverted the program. The SEC is investigating whether broker Cantor Fitzgerald Securities submitted noncompetitive bids in the names of employees and others without their knowledge to bypass the \$5 million limit. A Cantor spokesman says it is cooperating with the probe and calls it "unfounded."



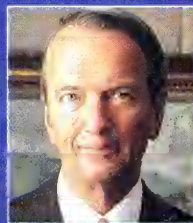


AMERICA GOES TO THE POLLS



This brief history of American presidential primaries is the first of four such essays that ITT will present in the course of this election year. Whatever our political beliefs or our party affiliations, we all have a stake in the outcome of our electoral process. And one way to encourage broad participation in the political process, we

hope, is to help Americans understand how the system works and where it came from. Its importance



Rand V. Araskog, Chairman, President, and CEO, ITT

First in a series of messages from

ITT

cannot be over emphasized; our present and future depend on it.



The United States was the first democracy in the world in which the people, not party leaders or elected officials, chose their candidates for high office. The American system of presidential primaries is elaborate, cumbersome, and at times enormously frustrating. It is also intensely democratic, the product of nearly a century of struggle by reformers whose faith in the people has exceeded their faith in political elites.

Throughout the nineteenth century, presidential candidates were chosen by a variety of methods, none directly responsive to popular sentiment. Until the 1820s, members of Congress gathered in party caucuses and chose presidential nominees. Beginning in the 1830s, candidate selection shifted to national party conventions; delegates were generally chosen by elected officials and party leaders in each state.

By the early 20th century, however, there was growing dissatisfaction with the process. Reformers, alarmed at the growing power of party organizations and the growing political effectiveness of great new industrial organizations, began to demand that the people have a more direct voice in choosing presidential candidates.

Governor Robert M. La Follette of Wisconsin, one of the great figures in the history of American reform, played a critical role in building the early primary system.

In 1905, he persuaded the Wisconsin legislature to establish a direct popular election—controlled by state officials, not party organizations—to select delegates to national political conventions. “No longer,” he promised, “will there stand between the voter and the official a political machine with a complicated system of caucuses and conventions, by the manipulation of which it thwarts the will of the voter.” Several years later, Oregon established a primary in which voters

expressed a preference for a particular candidate, whom delegates would be obligated to support through the first ballot at the convention. Most other primary states eventually adopted the Oregon system.

By 1912, 12 states had established mandatory presidential primaries, and it seemed only a matter of time before the system would sweep the nation. Theodore Roosevelt, running for president in 1912 on a third-party ticket (having been denied the Republican nomination that year despite winning every primary), called for a national presidential primary to eliminate the role of party “middlemen” altogether. President Woodrow Wilson called for the same thing a year later. In the meantime, eight more states

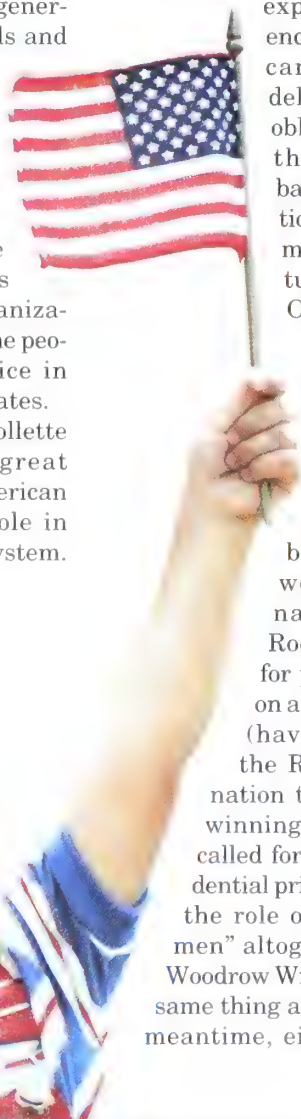


The 19th Amendment to the Constitution permitted all women to vote, starting with the 1920 election.

established their own presidential primaries; by 1916, there were 20 such elections.

But soon after World War I, as reform energies subsided, the presidential primary system went into something of an eclipse. From 1917 to 1945, only one additional state—Alabama—created a presidential primary. In the meantime, eight states abolished their existing primaries; and the primaries that survived had little effect on the nominating process. Many were simply devices for pledging delegates to a “favorite son,” who had no hope of nomination but could use his delegate strength to exercise power at the convention. In North Dakota, a commission examining the state’s 1932 primary (which no major presidential candidate had chosen to enter) concluded that “so far as expressing the preference of the . . . voters of the state was concerned, the election was a farce which cost the taxpayers \$135,635.” By 1940, the presidential primary system had reached its lowest ebb since 1912, with little-noticed elections in only 13 states.

For the primary system genuinely to succeed, it was clear, candidates and voters would have to believe not only that primaries were democratic, but that they were effective. In the 30 years after World War II, a series of dramatic primary



campaigns gradually proved that the system could make a difference. In 1948, for example, Harold Stassen, the young ambitious governor of Minnesota, launched a credible, and nearly successful, challenge to the Republican front-runner by defeating Governor Thomas Dewey in New York in a series of primary elections. Four years later,

the primary system has

never been static

and it will almost certainly

continue to change.

Dwight D. Eisenhower, a political opportunist, proved his vote-getting potential by running well in the Republican contests. And in 1960, John Kennedy overcame doubts of some party leaders by winning a series of crucial victories in that year's Democratic primaries. There are still only 16 states with primary elections, and nearly two-thirds of the delegates to both party conventions were still chosen by other means. But it was becoming difficult for party leaders in states without primaries to ignore these demonstrations of voter sentiment. In the late 1960s and early

1970s, the United States experienced a rise in popular democratic sentiment unmatched since at least the beginning of the century. It was fueled in part by dissent: by the civil-rights movement, the New Left, and protests against the Vietnam War. It was also a result of a much broader popular disillusionment with party leaders and elected officials. A crucial event was the 1968 Democratic convention, in which Vice-President Hubert Humphrey received his party's nomination without having run in a single primary. Like reformers in the early 20th century, supporters of other candidates demanded changes in the system to ensure that in the future the people, not the "bosses" and the "establishment," would control the nomination process.

In the years after 1968, the reformers enjoyed great success. By 1980 the number of presidential primaries had risen from 15 to 35; and in 1992, there will be 38 primaries, choosing over 80% of the delegates. Indeed, so decisive has the primary system become that the party convention now plays virtually no role in selecting a candidate. In the last five presidential elections, candidates have almost always locked up the nomination well before the end of the primary season.

But the success of the primary system has created its own problems. Critics complain that voters in a few states with early primaries exercise disproportionate influence; that the process of running in multiple primaries is too expensive

and favors candidates able to raise large sums of money; that independent voters are excluded from voting in most states (one reason why voter turnout in primaries is even lower than the dismal turnout that has become the norm in general elections). Some critics

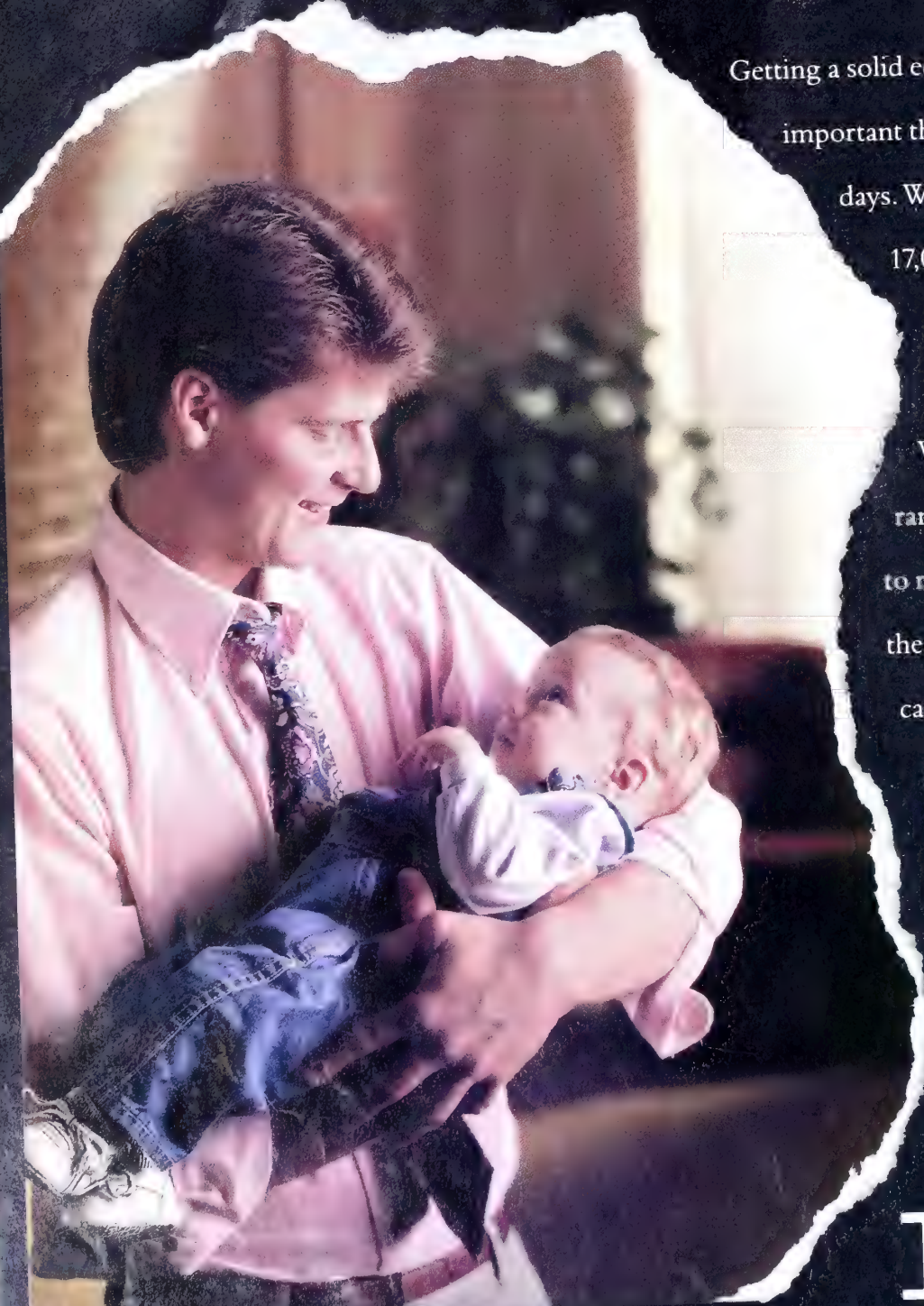


have revived the call of Theodore Roosevelt and Woodrow Wilson for a national primary; others advocate restoring significant power to party leaders and the convention itself. The primary system has never been static, and it will almost certainly continue to change. But there is almost certainly no alternative to a selection process based on popular participation. In the end, only informed and active voters can make the system succeed. ■

This text was written by Alan Brinkley, Professor of History, Columbia University



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ITT EDUCATIONAL SERVICES

ITT

TALK OF 'TOSSING THE BUMS OUT' MAY BE MORE THAN JUST TALK

During seven terms representing western Maryland's sixth congressional district, Beverly B. Byron rarely drew much attention. But on Mar. 3, she made the issue take notice—by losing a Democratic primary to a little-known state legislator. The key to the upset: relentless attacks on Byron's votes for pay raises and her foreign junkets.

Byron's loss helps explain why so many lawmakers, especially Democrats, are taking talk of "tossing the bums out" seriously this year. The advantages of incumbency are potent:

In the last three elections, more than 96% of members seeking reelection have won.

With voters angry and with reapportionment forcing many incumbents to run in new districts, this year could be different. Analysts predict the election of up to a dozen fresh faces, a development that would end the cozy relationships between lobbyists—especially business interests—and members. "This could be the most interesting congressional election since 1974," in the wake of Watergate, says Carleton College political scientist Steven E. Schier. "We're going to have a big shakeup here."

IR-DRAFTY. The barons of Capitol Hill have a good reason to run scared. The House is embroiled in a nasty fight over release of the names of members who wrote rubber checks on the House bank. Republicans want full disclosure, while the Democratic leadership wants to finger only a handful of flagrant violators. Junior Republicans want to use the scandal to attack entrenched power in the House, even if they force some senior GOP members in the process. "The Democrats are running this place for four decades now," says first-term Representative Rick Santorum (R-Pa.). "They think they're invincible and can do whatever the heck they want."

Faced with a budding populist revolt, some legislators are running out while the getting's good. At least 35 members are running, some of them to take advantage of a last chance

under House rules to convert leftover campaign contributions to personal use.

All the factors whipsawing Congress are on display in the Mar. 17 Illinois primary. The loss of two seats and the need to create minority-dominated districts made it hard to protect incumbents. The result: Some familiar names will vanish from the Hill. Two Democratic stalwarts, 18-year veteran Marty Russo and five-term William O. Lipinski, are facing each other in a South Side Chicago district. Polls show a close race.



RUSSO: FACING A TOUGH CONTEST

On the North Side, Frank Annunzio is retiring after 28 years rather than face Ways & Means Chairman Dan Rostenkowski.

That isn't sparing Rosty—who could have retired with a \$1.3 million war chest—from primary opposition. Redistricting cost him most of his loyal blue-collar ethnics, replacing them with Hispanics, suburbanites, and upscale condo dwellers. The 17-term incumbent, used to automatic reelection, has hired a political consultant and a pollster in his race against Dick Simpson, a former alderman who refuses PAC contributions and favors term limits. Although Rostenkowski should win, Simpson has been nipping at "Mr. Chairman's" heels, blasting Rostenkowski for doling out tax goodies to industries that contribute to his campaign.

Incumbents, especially committee chairmen like Rostenkowski, still have many weapons: PAC contributions from business and labor lobbyists, free postage, and tax dollars sent home for roads, buildings—even theme parks. But now, many members are thinking twice before using these tools—and inviting attack from incumbent-bashing challengers.

Even though most incumbents will survive the trauma of 1992, many will be scarred by the flames. An influx of reform-minded newcomers, many of them elected without PAC money, could bring a whiff of change to the musty halls of the Hill.

By Paula Dwyer, with Richard S. Dunham in Chicago

CAPITAL WRAPUP

THE CAMPAIGN

Watch for ties between President Bush's advisers and Japanese interests to become an important issue as the Presidential campaign moves to the industrial states. The latest link is former Senator Howard H. Baker, a member of the Bush-Quayle campaign finance committee, signing on to lobby for Honda (page 30). Baker, chief staff in the Reagan White House, will try to overturn a Customs Service ruling that Hondas built in Alliston, N.H., don't have enough North American content to escape duties. Challenger Pat Buchanan is readying ads for the Michigan primary blasting cam-

paign aides James H. Lake, a lobbyist for the Japanese auto-parts industry, and Charles Black, who represents Japanese seafood processors. Democrats can be expected to join the fun soon.

REAPPORTIONMENT

Any day now, the Supreme Court could throw this fall's elections into chaos by striking down reapportionment based on the 1990 census. At the request of Montana, which lost one of its two House seats, a federal court said Congress' reapportionment formula violated the one-man, one-vote principle. If the ruling is upheld, Congress might increase the size of the House, fixed by law at 435 in 1910.

THE ENVIRONMENT

A stubborn appeals court may soon create jobs for hundreds of lawyers—and lots of confusion for business and regulators. Last year in Washington, the U.S. Circuit Court of Appeals overturned two broad Environmental Protection Agency rules defining hazardous waste. But the judges didn't say whether their ruling should retroactively affect the large number of cases brought and resolved under the decade-old regulations. On Mar. 5, the court rejected the EPA's request for clarification of the ruling. Now, the issue of retroactivity will have to be argued on a case-by-case basis.

IN A CATEGORY OBSSESSIVE AND LIGHTER, COMPAQ V ANOTHER ADJ

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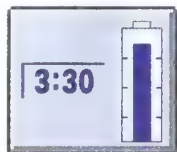
Which explains why the latest 386SL notebook technology from the labs in Houston — the new COMPAQ LTE Lite/25 and LTE Lite/20 PCs — are not only the lightest (a scant 6 lbs.) and the smallest (only 8.5"x11"x1.75") notebook PCs that we've ever built. They're also the smartest.

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It can even instruct the notebook to save all open files to the hard drive should the battery power run too low.

And the energy-saving features in our newest notebooks go far beyond the presence of an Intel 386SL chip.

To make the most of the smarter battery, the new COMPAQ LTE Lite also comes with user-adjustable power-drain settings, and three dif-



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A MOST MODERN MODEM.

Our optional 9600-bps modem for the COMPAQ LTE Lite PCs would make even Alexander Graham B. proud.

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Internal Modem is compatible with the broad base of today's communications protocols.

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In modem talk, that means true V.32 9600-bps data transmission at V.42bis compression for up to 38.4 kbps throughput, as well as full support for Hayes AutoSync.

This little marvel negotiates the fastest transmission throughput that the other end of the line can muster, whether it's sending or receiving.

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CANADA

QUEBEC: WHAT PRICE FREEDOM?

Its drive for autonomy builds steam, but divorce may rend Canada

Deep in the recesses of a Quebec National Assembly annex sits a windowless room. It's much like any other conference room—except that on its walls are plans for a quiet revolution. In this "war room," staffers of a special commission on Quebec's sovereignty are making detailed plans on everything from a separate Quebec army to a national dairy farm policy. "We're preparing the real stuff, just in case," says one staffer. The commission expects to have a sovereignty blueprint before Quebec votes on its future in a late-October referendum. It's a vote that could unravel the nation of Canada.

French-speaking Quebec has been restive about its place in English-speaking Canada for decades, but now the tension is reaching a new high. Fed up by years of unmet demands, Quebec has given Ottawa a deadline: Either it presents Quebec with an acceptable plan for keeping the province within Canada, or Quebec will ask its voters to decide for themselves. If they vote *oui* for sovereignty in October, the province would break from Ottawa a year later.

As relations between English- and French-speaking Canadians deteriorate, it seems inconceivable that Canada will offer Quebec everything it wants. The central government on Feb. 28 made a proposal, but Quebec Premier Robert Bourassa quickly rejected it, calling it "domineering federalism." The proposal was even more bitterly condemned by Quebec's nationalists, who advocate immediate independence.

PLAYING CHICKEN. What makes the brinkmanship dangerous is that many Quebec leaders, executives, and citizens are confident they can go it alone. Quebec accounts for almost one-quarter of Cana-

da's gross national product. Its corporate crown jewels include Hydro-Quebec, which with \$34 billion in assets is the world's No. 7 electric utility, and aircraft and transportation equipment builder Bombardier Inc., with nearly \$3 billion in sales. And its technocrats are pioneering an aggressive industrial policy—the most extensive in North America. Despite warnings from some that sovereignty would cripple the province, a poll of Quebec's business leaders last year showed 72% believed it would actually improve the economy over time.

Other Canadians are aghast at the prospect. The threat of Quebec's sovereignty "casts a dark shadow on everything we want to do," especially economic prospects, says Constitutional Affairs Minister Joe Clark. Leaders of the English-speaking business community also warn of a national apocalypse. But rhetoric aside, the rest-of-Canada, as Quebecers now refer to it, is not inclined to meet Quebec's demands for

greater powers than other provinces enjoy. English-speakers argue that giving Quebec such leeway would undermine the nation as a whole. Many also warn that Quebec would be crushed economically by a break up. It all shapes up as a national game of chicken that neither side can win. International nervousness over this showdown has helped drive the Canadian dollar under 84¢ from 89¢ last fall, forcing the Bank of Canada to raise interest rates.

Sovereignty for Quebec won't lead to civil war, as Yugoslavia's breakup has. Rather, Quebecers want political independence, a separate foreign policy, and full taxation and lawmaking powers. But they also want to continue using the Canadian dollar, maintain trade relations with the rest of Canada, and carry Canadian passports.

'BUILDING A NATION.' But even such minimal nationalism could have profound impact. For one thing, it would greatly complicate relations with the U.S. just as Washington is trying to create a North American free-trade zone. Today, the U.S. and Canada are partners in \$200 billion of two-way trade, and goods and services flow across the border under the rules of a four-year-old free-trade pact. But opposition to the free-trade agreement is mounting in English-speaking Canada, and Quebec goes, the rest of Canada might try to renegotiate the pact.

Indeed, if Quebec secedes, the rest of Canada could come unglued. The depressed Maritime provinces would be cut off from others, while western provinces



ASSEMBLING AIRPLANES AT BOMBARDIER'S MONTREAL PLANT: AN INDUSTRIAL CROWN JEWEL WITH \$3 BILLION

ould reject Ontario's dominance. Eventually, predicts John Ciacia, Quebec's Minister of International Affairs, some provinces, such as Alberta, might try to join the U.S. No matter how the immediate crisis plays out, it is clear that Quebec's quiet revolution is moving ahead. *La Belle Province* is taking control of its affairs, including economy, social programs, and culture, step by step. "What you're doing is building a nation," says U.S. Consul General William McCahill Jr. in Quebec City. They have cultural identity and pride, they have pride in the institutions they've built up, and they want more of it."

Quebec's economic success has given it a powerful boost to nationalist feelings. Alienated from English Canada, Quebec has developed its own model of close cooperation among business, labor, government, and banks, often called Quebec Inc. At the heart of this model is Hydro-Quebec, the province's powerhouse. Owned by the state, it's a world-class electric utility. Cheap electricity has in turn fueled industrial development throughout the province, such as energy-intensive aluminum smelters. And Bombardier, originally a small snowmobile maker, is a transportation-equipment giant that builds subway cars for New York City and constructs planes in the U.S., Britain, and Canada. In January, it made a winning bid for the ailing Toronto-based de Havilland division of Boeing Co.

The Quebec government is actively or-



BOURASSA: WALKING A POLITICAL TIGHTROPE

chestrating this economic drive. Quebec's Industry Minister, Gérald Tremblay, has a plan to create 550,000 jobs by the year 2000 and bring unemployment down to 7%, from 12% today. He has divided Quebec's economy into clusters. Some, such as aerospace, electrical power-generation equipment, and information technology, are already competitive. Others, including forest products and petrochemicals, need help. Tremblay gets key companies in these clusters to attack industry problems together and works to change inhibiting government policies.

ROUGH START. A thriving province is one thing; a sovereign nation something else again. Many economists figure that an independent Quebec would be in for rough times in the first few years. Already, Quebec has its weaknesses. With unemployment high, some of Quebec Inc.'s leaders are under pressure. Hydro-Quebec has postponed its \$11 billion Great Whale hydroelectric project because of environmental opposition and New York State's desire to renegotiate its multibillion-dollar, 20-year contract on better terms. The forest-products and clothing industries have been pummeled.

Sovereignty could create more economic pain, especially in the short run. A sovereign Quebec would have to assume its share of Canada's \$340 billion debt. That in turn could drive Quebec's debt load sky-high, and spooked foreign investors could then force Que-

bec to pay a premium on its international borrowings.

On the trade front, Quebec could see relations with the U.S. sour despite the province's free-trade stance, as Quebec Inc.'s policies of subsidization come under fire. The U.S. Commerce Dept. is already challenging the low rates Hydro-Quebec offers industrial customers. Trade with Canada would also be strained.

FALLOUT. The man trying to manage the growing crisis is Premier Bourassa, head of the ruling Liberal Party. A federalist who believes Quebec would be better off remaining as part of Canada, Bourassa is trying to quell separatist fervor by insisting that Ottawa

cede substantial powers to Quebec. Specifically, his Liberal Party wants Quebec to have exclusive jurisdiction over 22 areas, among them culture, education, and regional development. The federal government would run only six, including defense and currency. Power would be shared in nine other areas. In this way, Quebec would operate with far more autonomy from Ottawa than other provinces—in effect, a nation within a nation.

While Bourassa tries to sell English Canada on this approach, the Parti Québécois (PQ) is trumpeting sovereignty. PQ leader Jacques Parizeau argues that support for sovereignty is far stronger now than it was in 1980, when the first referendum on the issue was defeated. In November, polls found that 56% of Quebecers expect the province to be independent within a decade, while only 11% expect the status quo to remain. And 39% support sovereignty, while 32% lean toward federalism. The one-third in the middle sympathizes with Quebec's aspirations but worries about the economic fallout. So Parizeau has nimbly crafted a new definition of sovereignty. While Quebec would "leave" Canada, says Parizeau, it would then negotiate ties to minimize the disruption for itself, such as use of the Canadian dollar, free circulation of goods and services between Quebec and Canada, and the right of Quebecers to hold Canadian passports.

As the fall deadline draws nearer, optimists are betting that the Canadian genius for muddling through will eventually prevail. They may be right, since the costs of divorce are beginning to dawn on many Canadians on both sides. But Canada has never been this close to the brink. Even if the Canadians maintain a single nation, there are likely to be permanent shifts in relations between French- and English-speaking Canada. The consequences will resonate throughout the continent. Whether Bourassa or Parizeau prevails, Quebec's future direction is clear. It is only a question of how far, and how fast, it goes.

By William C. Symonds in Quebec City

HOW QUEBEC WOULD STACK UP

STRENGTHS

World's 15th-largest economy, and 9th-largest U.S. trade partner of the U.S.

Leading companies, including Hydro-Quebec, Bombardier, and SNC-Lavalin

Strongly probusiness environment, favoring free trade and pushing North America's most aggressive trade strategy

Good labor relations with very few strikes

Well-developed financial institutions in place, with \$110 billion in assets

WEAKNESSES

▶ Would have to assume its share of Canada's \$340 billion debt, causing severe debt load

▶ Creditors would force it to pay a stiff premium on international borrowings

▶ Would try to keep Canadian dollar. But this means ceding control over monetary policy

▶ Could face increasingly strained trade relations with both the U.S. and Canada

▶ Unemployment, already 12%, would rise in the short run to higher levels

DATA: BW

Creating borders in Word for Windows was easy for test participants—they simply chose the easy-to-locate "Border" command.

Exotic Excursions
23 Cajun Court
New Orleans, LA 36857

May 15, 1992

Steve Sullivan
8762 W. 180th Pl.
San Diego, CA 90834

Dear Steve:

During the past two years Exotic Excursions has seen a record 200% growth in revenues. This success has been exciting, but we now must adjust for our very fast growth. The size of our office impedes proper customer service and is inadequate for the increased level of store traffic.

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- **Thousands of potential clients will attend the grand opening of the new Exotic Excursions office.**

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Location	Floor	Meeting	Bath	Street	Cost/Sq.
Court A	4500	N	Y	Main	\$2100
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I recommend that we lease the Court C location. It is substantially...

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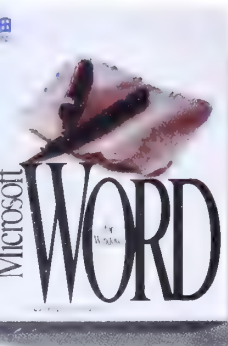
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Every week during the development of Word for Windows, we invited WordPerfect users to bring in their letters, memos, or whatever business documents they use in their own jobs, and try them out using Word for Windows. Our Product Development

people at Microsoft called these sessions "usability studies." Which is just a fancy, shorter way of saying "what-do-people-use-a-word-processor-for-and-how-can-we-make-it-easier-for-them-to-use-it."

These studies not only helped us to design features that make everyday tasks easier, but helped us to make the more advanced word processing features like grammar checking, drawing and charting, easier to use as well.

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THE HARVARD MAN IN MITSUBISHI'S CORNER OFFICE

Does Makihara's promotion signal the rise of a new breed of executive?

Born in England and christened Bernard, but has since gone by "Ben." Alumnus of St. Paul's School and Harvard. Spent two years as a counselor at summer camp in Vermont. Assignments totaling 22 years in Seattle, Washington, New York, and London. Good friends include CEO James D. Robinson III of American Express and CEO Gerald Grinstein of Burlington Northern. Son works for Goldman Sachs, daughter for Time magazine.

Met Minoru "Ben" Makihara, the newly named president and CEO of \$123 billion Mitsubishi Corp., Japan's powerful trading firm and flagship of the country's largest *keiretsu*, or corporate grouping. Never before has a major Japanese company been run by someone as cosmopolitan as the 62-year-old Makihara. So although internationalization gets lots of lip service in Japan these days, Makihara's ascent to the pinnacle of Japan's business Establishment has set local business circles buzzing.

As a rule, an executive can't reach the top without the proper Japanese university credentials and much time spent at the home office. After all, he would lack the network of high-level contacts essential to success in the Japanese business world. He might also "stink of butter," the Japanese put-down for colleagues who have spent too much time abroad.

But with U.S.-Japan relations at a postwar low, Mitsubishi decided in late February that Makihara's U.S. experience mattered more. That positions him eventually to succeed Akio Morita, Sony Corp.'s 71-year-old chairman, as Japan's business ambassador to the world. "He'll be an enormously important bridge between Japan and the U.S. business-wise," says Frank A. Weil, former Commerce Under Secretary and Makihara's longtime acquaintance.

NEW DIRECTIONS. Makihara is already signaling that Mitsubishi must alter its ways. "The expectations of employees, shareholders, and the outside world are changing," he says. "So new directions have to be sought." That means making jobs more satisfying, paying the environment more heed, and giving shareholders a bigger share of profits, he says.

Makihara made his latest mark in

New York, while running the big U.S. subsidiary Mitsubishi International Corp. from 1987 to 1990. His main contribution was to help guide the trading company into new investments and technologies. It was on his watch that Mitsubishi bought control of Aristech Chemical Corp. for \$877 million and took half-ownership of UCAR Carbon Europe, an \$850 million-a-year business. "It is novel for a trading company to invest in manufacturing," notes Robert D. Kennedy, chairman and CEO of Union Carbide Corp. When he officially takes over in

him as an aggressive businessman," she says. "He's soft-spoken, quiet, and serious. At home he never talks about work at all." She says he likes to curl up with English-language spy novels to relax.

Makihara's climb up the ladder wasn't hurt by his blue-blood Mitsubishi pedigree. His father was a Mitsubishi man who served in London and the U.S., and his wife is the great-granddaughter of Mitsubishi founder Yataro Iwasaki. Others note that Makihara, a veteran of Mitsubishi's marine products division, came from the company's "soft" side. Traditionally, the presidency has alternated between that and the "hard" side, which includes machinery and steel. This time it was the soft's turn. But company insiders insist Makihara got where he is by merit, not luck.

He steps in at a time when Mitsubishi is rolling in dough. The company is now Japan's most profitable major trader thanks to its early shift from depen-



Never has
a major
Japanese
company
been run by
someone as
cosmopolitan
as Ben
Makihara

June, Makihara is likely to make such acquisitions on a much larger scale.

What's more, he is a symbol of a new type of Japanese corporate leader who is "extremely comfortable in two cultures," says Kennedy. A Japanese colleague who has worked closely with Makihara says his long U.S. experience has made Makihara more informal than most top Japanese executives. "He's very open-minded," says this colleague. "The door to his office is usually open for everybody. He likes a good joke."

Yet Makihara, who rarely gets angry, is no American-style mover and shaker. "Beneath his business suit is a Japanese gown," says Weil. Makihara's daughter, Kumiko, describes her father as an intellectual. "It's difficult for me to imagine

dence on mere transaction fees to investments in such businesses as manufacturing plants and liquified natural gas projects in Southeast Asia. "Mitsubishi has been a leader in moving into that region," says Patricia Jennings, an analyst at Baring Securities (Japan) Ltd.

Given his U.S. expertise, Makihara says he'll probably speak out more on bilateral issues than his predecessor. In particular, Makihara is rankled by the perception that Japan's *keiretsu* are out not only to exclude foreigners but to take over the world. "I think that's totally off the mark," he says. If anyone can convince Americans that Japan's companies aren't hostile, Makihara can.

By Robert Neff in Tokyo, with William Holstern in New York

EDTIME, TORIES? R JUST A WAKE-UP CALL?

cession-bashed Brits will take a hard look at Major in April elections

For troubled Britain, a general election ought to offer a golden opportunity for a new start. But when Prime Minister John Major stood in front of 10 Downing St. on Mar. 11 and called one for Apr. 9, financial markets didn't see it that way. The London stock market fell in one day.

Investors and executives have plenty of reasons to worry about Britain—and the election is one of them. The economy remains mired in the longest postwar recession. Rows of boarded-up shops blight the once

prosperous towns along the River Thames. With house prices still falling, much of London's office space vacant, and unemployment at 9.2%, pollsters give the Labor Party its first real shot at unseating the Tories since Margaret Thatcher began her reign in 1979. But they also think that a hung Parliament—one with no party winning a clear majority—is the most likely outcome.

The prospect of political turmoil is what Britain needs least right now. The recession has exposed deep structural weaknesses that Thatcherism failed to cure. At the same time, Britain faces a more restructuring and pain as Europe becomes a single market. The fast-changing relationship with its European neighbors could be just the tonic for beleaguered Britain. But if the British government produces leadership that can play the game smartly, they could find themselves buried in Europe's second tier.

MAJOR GONE. The voters will have a clear choice in the election. The Conservatives are repackaging Thatcherism, albeit with some softer tones. Major is hitting the hustings with a program of low taxes and continued faith in market forces to spark investment. In a budget unveiled on Mar. 10, Major proposed a new kind of modest tax cuts aimed at getting the votes of lower paid workers.

Labor, meanwhile, is far more interventionist. Standard bearer Neil Kinnock wants to use higher taxes on the rich to finance a program to revive industry. It could range from training programs to



SOOTHING: KINNOCK SWEARS OFF TAX-AND-SPEND POLICIES

tax incentives for new investment. A key challenge for the former Welsh schoolteacher is simply to build confidence that a Labor Party out of power for 13 years is capable of governing.

A Labor victory is one thing, but investors and executives fear a muddled outcome even more. That would lead to coalitions with minor parties, especially Paddy Ashdown's Liberal Democrats. The fear is that economic policy would drift while a weak government spent its time bickering.

The political crisis reflects the failure of Thatcherism. This has opened the door for Kinnock's retooled Labor Party. He has allayed some fears of a return to Labor's tax-and-spend days of the 1970s and now talks of a grand business-government initiative to rebuild the economy. Many voters, including some industrialists, find Kinnock's pitch more appealing than Major's. "We want a partnership between government and industry, like you find in other countries," says one Labor supporter, Simon Haskell, chairman of textile maker Perrotts Group PLC.

Still, there are

concerns that a majority win for Labor could rock business confidence. These center on Kinnock's pledge to raise the top tax rate from 40% to 59% and introduce a minimum wage, and on the party's ties with trade unions, its traditional paymasters. "A blow to confidence could delay the recovery by up to 12 months," says Keith Skeoch, chief economist at James Capel & Co.

In recent years, most voters have preferred the Tory approach to economic questions, but the mood is shifting rapidly. In the nasty three-week campaign, the Conservatives will be hard-pressed to maintain the coalition of wealthy, middle-class, and semiskilled workers who flocked to Thatcher but have been hammered by the recession. "The economy is a mess," grouses John Romijn, 40, a longtime Conservative supporter who is about to lose his job as a truck driver. "Reducing taxes won't get me to vote for them again."

There are some bright spots. Now, both parties are at least chanting the mantras of improved education and training. And recession is forcing the traditionally insular British to focus on Europe. For the first time, all three party leaders profess to be committed to European unity.

SHODDY GOODS. To profit from the new unity, British industry, heavily dependent on low-skilled and low-paying jobs, will have to go upscale. If Britain fails to shake off its reputation for low-quality products and poorly trained workers, investments from Americans, Japanese, and Germans may go elsewhere in Europe. "We must get our plants in Britain close to the level of those on the Continent," says Bruce Blythe, Ford of Europe Inc.'s chief strategist. The British plants, one-third less productive, "won't be kept open otherwise," he warns.

Economists say that the tough European financial constraints that are designed to drive down budget deficits by the mid-1990s to prepare for a single currency should help Britain. "The potential payoff is lower inflation, lower interest rates, and stability," says Richard Freeman, chief economist of Imperial Chemical Industries PLC. But Major's campaign-kickoff budget with its soaring \$48 billion deficit was a step backward. Expect more of the same unless voters give someone a strong mandate.

By Richard A. Melcher in London



MAJOR AT THE OPERA: A REWORKED TUNE

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**Merrill Lynch Financial Consultants Lou Telerico and
Geoffrey Paul at our Corporate Training Center, Princeton, NJ campus.**

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WILL BUSH'S INACTION DOOM YELTSIN —AND THE NEW WORLD ORDER?

A storm is brewing in Moscow. On Mar. 17, rightwingers, who claim among other things that the U.S. plans a military occupation of the former Soviet Union, will march there against democracy. On the same day, up to 800 former deputies of the disbanded Congress of People's Deputies may call for a return of Soviet power. Meanwhile, a former aide to Mikhail S. Gorbachev warns that another hard-coup d'état is in the works. Against this unsettling backdrop, Russian President Boris N. Yeltsin is struggling ahead with his painful economic shock therapy. Further price hikes on food and fuel will rock consumers, while massive restructuring of industry could cost millions out of work.

So far, there has been an unsettling absence of American efforts to rally support for Yeltsin. The Russian leader's ouster or defeat of his reforms could mushroom into a disaster for the West. But George H.W. Bush, who played such a crucial leadership role in other big international events of his presidency, has been surprisingly mute. He seems to be paralyzed by isolationist criticism of his supposed overemphasis on foreign policy.

'INFINITELY WORSE.' Bush's behavior has already alarmed key European leaders along with many internationalists such as former President Richard M. Nixon. They insist that Bush is squandering an enormous opportunity that he could create. "If Yeltsin fails, the alternative isn't going to be anybody better but somebody infinitely worse," Nixon says. But the danger goes beyond Russia. With the cold war over, the world is waiting for Bush to define the New World Order he promoted during the Kuwait crisis. While he frets over many victories and delegate counts, Bush may be missing a chance to favorably define America's role in the world for many years as well as his own place in history. If he is

passive, it can only reinforce the notion that the U.S. is losing power to Germany and Japan, which have economic clout but not enough political authority to keep such bullies as Saddam Hussein in line. "Dictatorship rather than democracy will be the wave of the future," Nixon says.

Right now, action on aid for Russia is the chief litmus test of Bush's statesmanship. So far, Washington has allocated only \$1.5 billion in outright aid and another \$3.75 billion in loan guarantees for food exports. Germany, by contrast, has provided more than \$35 billion in trade credits and aid, much of it to induce Soviet forces to leave eastern Germany. But the point is less money than leadership. Russia scares Europe more than it does the U.S. The collapse of Russia, says Italian Foreign Minister Gianni De Michelis, "is the biggest single threat to continuing European integration."

BETTER SLEEP. There is much to be gained by orchestrating a world deal on Soviet aid. A strong initiative on Russia from Washington could sweep away a lot of European skepticism about America's future role in their environs. Japanese-Russian tensions over the occupied Kuril Islands, seized by Stalin during World War II, could also be eased in a broad aid-for-political considerations swap.

The U.S. could also buy itself better sleep at night. By working closely with Yeltsin, Bush could influence orderly disarmament. Americans seem to have forgotten there are many strategic nuclear weapons still threatening them in the former Soviet Union, says Yuri Pinchukov, an arms control expert from the Institute of World Economy & International Relations in Moscow. But if hardliners seize control in Moscow, the cold war might begin all over again.

By Peter Galuszka in New York, Brian Bremner in Washington, and Rose Brady in Moscow



ANTI-YELTSIN RALLY ON RED ARMY DAY

GLOBAL WRAPUP

BELGIUM

The government is set to approve the purchase by Air France of a one-third stake in its airline, Sabena World Airways. But analysts are wondering why Brussels wants to pair a state-owned Sabena with another state-owned money-loser. The answer is that overstaffed Sabena is willing to try anything to wiggle out of cutting jobs in the shakeout expected in the airline industry when Europe's single market opens. The government spurned deals with KLM and British Airways, free-market players that have tough restructuring plans in mind. It prefers underfunding Air France, which mainly

wants to block rivals from using the Brussels hub. Belgium is forging ahead with a costly expansion of Brussels' Zaventem airport—although Air France could eventually diminish its clout as a hub.

POLAND

The Polish government appears to be underestimating the country's political will to put up with pain for the sake of economic reform. The fledgling government of Prime Minister Jan Olszewski seemed determined to turn back the clock on economic reform. But in early March, the Polish parliament rejected the Prime Minister's plans to increase government spending

and expand the money supply. Many economists had warned that such moves would reignite hyperinflation.

INDIA

Prime Minister P.V. Narasimha Rao's victory in a vote of confidence on Mar. 11 is clearing the way for shifts that are radical for India's state-directed economy. The new Prime Minister wants to allow foreign companies control of their joint ventures with Indian partners. Rao is also pushing for reductions in subsidies. Since last fall, India has approved more than \$100 million in foreign investments, including projects by IBM, Du Pont, and General Electric.

The cost crunch.



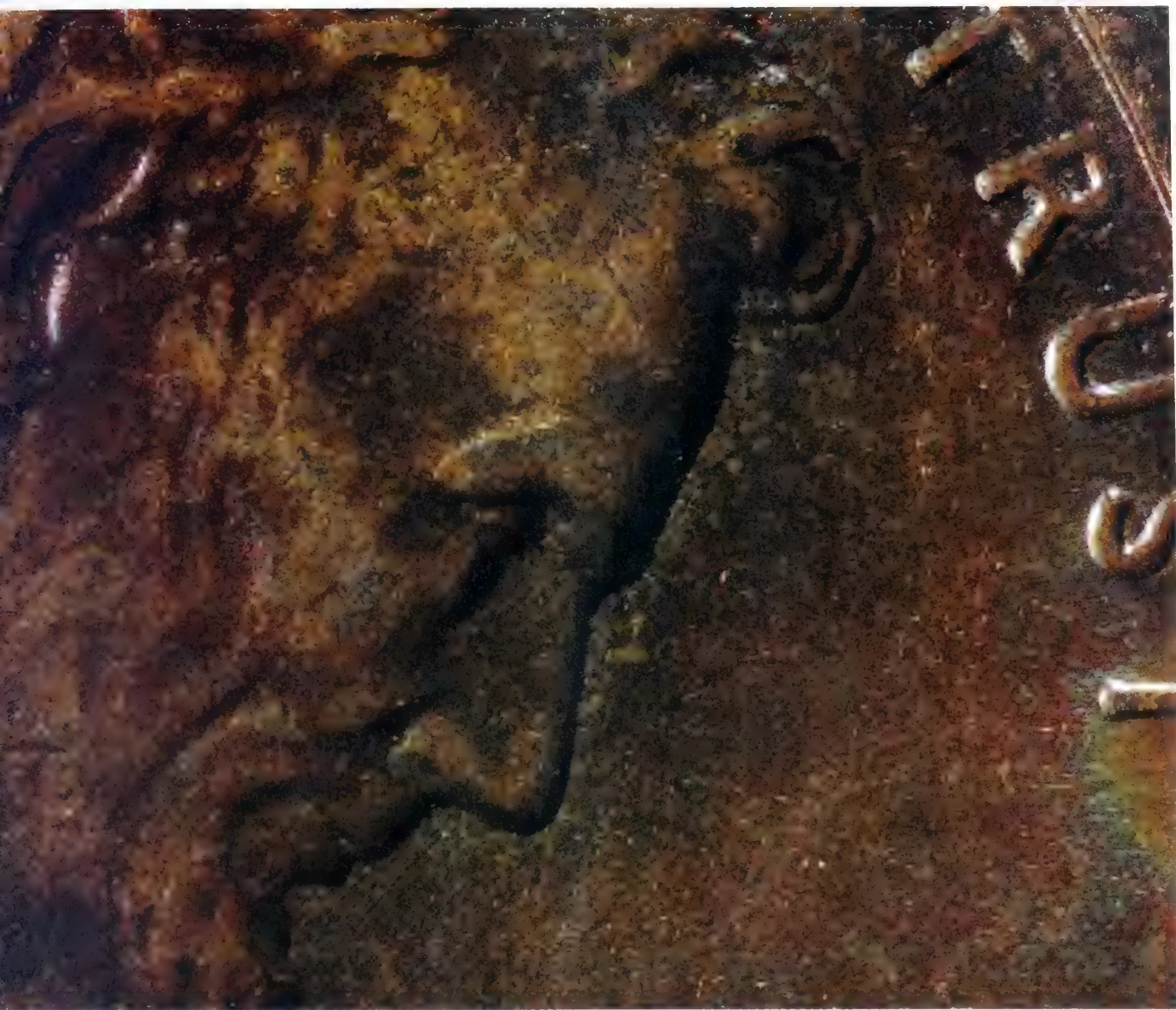
Budgets get cut. Demand

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DOWNWARD MOBILITY

CORPORATE CASTOFFS ARE STRUGGLING JUST TO STAY IN THE MIDDLE-CLASS

In 1988, Allen Stenhouse had a steady annual income of \$50,000, a 24-year career in insurance, a \$279,000 condo in West Hartford, Conn., and a marriage of 14 years. He had worked his way up the hard way, going to Georgia State University at night. At 48, he had served as senior treasurer of the local United Way and was an active member of the Greater Hartford Arts Council.

Two days before Christmas that year, Stenhouse was laid off as business manager of CIGNA Corp.'s health care department. After helping McKinsey & Co. cut his department's budget by 20%, Stenhouse learned that he would join the 2,000 others cut by CIGNA at that time.

Despite good outplacement help, intense networking, dozens of interviews, and hundreds of resumés mailed, Sten-

house has yet to find permanent work. He divorced in 1989, worked for minimum wage in the stockroom of a Marshalls Inc. discount store in 1990, and lost \$13,000 of his savings starting up his own financial consulting business in 1991. Early this year, his condo was foreclosed and auctioned off. He owes the IRS \$22,000 in back taxes and penalties because he withdrew his 401(k) re-



JOB DEATH: GRIEVING AND RECOVERING

Dealing with downward mobility matches the stages of dealing with death. You deny the reality of job death, it happens, you suffer, grieve, adjust your values, then act to recover

IT'S ALL AROUND YOU ...

Well-paying jobs in large corporations are permanently disappearing for many managers and professionals. Only a quarter of those laid off will be reemployed in big companies. The rest will work for smaller companies, consult, or "temp"—at 20% to 50% less pay

BUT IT CAN'T HAPPEN TO YOU

You see friends, relatives, and neighbors losing their jobs and failing to find new ones. But your company is too profitable, or you're too powerful within the organization. And you'd never be out of work for long. You've got marketable skills and a golden resumé

ment funds early. Several months later, he sold his camcorder, photocopier, and fax machine to pay bills.

Today, Stenhouse lives on \$1,039 a month in Social Security disability payments in a \$575-a-month apartment. He has no medical insurance and pays for a psychiatrist out of his own pocket. "I've lost the fight to stay ahead in today's economy," he says. "I was determined to find work, but as the months and years wore on, depression set in. You can only be rejected so many times; then you start questioning your own self-worth."

AT SEA. Stenhouse has lost more than his job: He has lost his place in society. Though his case is extreme, he's not alone. After years of layoffs, the specter of downward mobility is haunting legions of once-secure managers and professionals. They face the permanent loss of the income, possessions, and status long considered the defining elements of the middle-class life. Corporate stalwarts such as Gen-

eral Motors, United Technologies, and IBM join a long list of downsizing companies, the economic trajectories of thousands of white-collar workers are plunging, producing deep social, psychological, and economic dislocations. Managers and professionals who once drew their status from well-paying corporate jobs now find themselves cast adrift, without a sense of personal identity for the present or economic security for the future.

Behind the curtained windows of comfortable suburbs such as Fairfield County in Connecticut, Lake Forest outside Chicago, and Danville near San Francisco, stunned families are discovering that the social escalator is going down for the first time since the Great Depression. "It's a shock of the highest order for these people to find themselves downwardly mobile, because they believed

**MANY MANAGERS
AND PROFESSIONALS
'SIMPLY DON'T KNOW
WHERE THEY FIT
OR WHO THEY ARE
ANYMORE'**



their educational credentials and work achievements would protect them from the kinds of devastation common among blue-collar workers," says Katherine Newman, professor of anthropology at Columbia University and author of *Falling From Grace: The Experience of Downward Mobility in the American Middle Class*. "Managers and professionals define their social identity through occupation more than anyone else, and in today's mar-

ketplace, many simply don't know where they fit or who they are anymore."

'DUMPIES.' Just as the last decade was defined by yuppies and their flamboyant material excesses, the 1990s may come to be the age of "dumpsies"—downwardly mobile professionals—and their struggle to stay in the upper end of the middle class. The downwardly mobile aren't just being temporarily cut loose in a recession. Since the mid-1980s, as corporations have responded to global competi-



UNTIL IT DOES

...e to downward mobility. You spend
...trying to find another job as good as the
...just lost. You use up all your savings.
...another job with a much smaller compa-
...lf the pay, but that doesn't last long
...This time you get no severance package

NOW WHAT?

You face reality and realize your family income
will be drastically reduced for years. Kiss the
credit cards and vacations goodbye. Everybody
in the family works—your spouse, your kids.
You turn to your church or synagogue for
networking, mortgage money, maybe even soup

YOU START THE CLIMB BACK

You change tactics as your job expectations
change. You go to school at night and do interim
jobs in the day. You join the family business,
start a new one, or go into teaching. Like strug-
gling generations before you, you focus family
resources on your kids' education

tion and technological change by merging and consolidating, downsizing and de-layering, some 2 million middle-management positions have been permanently eliminated.

As their well-paying jobs vanish forever, these executives are plummeting down the occupation ladder, accepting less income and status as they fall. "Like the blue-collar steel and auto workers of the early 1980s, most of these white-collars will never get back the earnings position they once had," says D. Quinn Mills, professor of organizational behavior and management at the Harvard business school. "These managers and professionals won't get the jobs back in the big companies that

pervading America's executive class.

The newly dispossessed are increasingly aware that they often have nowhere to look but down. When big corporations began laying off white-collar employees in the early 1980s, 90% were quickly reemployed in a similar job in a large company at the same pay or better. In the late 1980s, only 50% got back in. Today, that figure is down to 25% and falling, according to Charles Sweet, president of A.T. Kearney Executive Search. "There just aren't those jobs anymore, and they can't hope to ever get them again," he says. "They're going to have to think of other ways of being employed."

That translates into taking jobs in

tems, pay drops from \$170,000 to \$75,000, and for controller from \$200,000 to \$80,000. And benefits fall about 25%.

True, those are hardly poverty wages, but a \$100,000 pay cut is a rude shock at any level, and a painful reversal of the traditional white-collar expectation that the next job will always be bigger and better. And executives who take up temporary work or become consultants often suffer greater declines in earnings and may lose all benefits.

BREAD AND BUTTER. Just as the pain of the last recession was felt most heavily by workers in the Rust Belt, middle management in service and high-tech companies is feeling a disproportionate pinch this time around. While middle

managers represent only 6% to 7% of the nation's work force, 16.8% of corporate layoffs have come from their ranks over the past three years, according to a 1991 American Management Assn. survey. Filling jobs for managers in the \$60,000 to \$80,000 bracket was once the bread and butter of search firms. Today, such searches are down 40% to 50%, says Sweet. Those jobs are likely to be scarce long after the recession ends, adds Gerald Roche, chairman of search firm Hendrick & Struggle Inc.: "Minimal management and minimal administration will be with us for at least a decade."

And even those who do manage to snag one of the dwindling

number of big-company jobs often discover that the oversupply of bankers, salesmen, and others is depressing compensation levels. For example, corporate staff jobs that paid starting salaries of \$140,000 in 1989 now offer \$118,000 at the same company, according to Drake Beam Morin. Compensation for marketing and sales positions, \$85,000 back then, is down to \$76,000 (chart).

But managers and professionals who take hefty pay cuts are the lucky ones. At least they've been able to find jobs. Last May, 55-year-old Gerald Feldman of Hamden, Conn., who has an MBA, lost his \$57,000 job as director of finance and administration for a midsize office-equip-



ALLEN STENHOUSE

His 24-year career in insurance came to an end when he was laid off two days before Christmas, 1988. His home has been foreclosed, and his marriage has ended: 'I have lost the fight to stay ahead in today's economy.' But he's fighting. He sends out resumés every day

offered that special kind of status and security."

Painful as downward mobility is for those affected, it's also bad news for the economy as a whole. In the 1980s, highly paid managers and professionals working for big corporations were the cream of the consuming class, borrowing and spending as if tomorrow would always be better. But downwardly mobile families make lousy consumers—and so do their neighbors, friends, and relatives, who are terrified that they may be next. The sharp decline in consumer confidence is a reflection of more than just the recession. It is also a measure of the sense of foreboding that increasingly is

smaller companies, performing interim work, or becoming self-employed—mostly at lower compensation. "It's a buyer's market out there," says William Morin, CEO of Drake Beam Morin Inc., the largest outplacement firm in the country. "Smaller companies can pick up really talented people today for a lot less money." The head of human resources at a \$10 billion corporation averages about \$240,000 in base salary, according to Hewitt Associates, a compensation consulting firm in Rowayton, Conn. The same job pays about one-third as much—\$85,000—at a company with \$100 million to \$200 million in sales. For the head of management information sys-

at retailer. He quickly a part-time job work- for a tax preparation ice at \$150 a week, work was slow, and recently lost the post. dman currently res- \$270 a week in ex- ded unemployment efits. His wife, Elaine, is the chief breadwin- making \$8 an hour king in collections for etailer. They are four ths behind on their tgage and have re- ed a notice of foreclo- e on the house they e lived in for 26 years. n the early 1980s, they t on a "humongous tgage," Gerald Feld- says, to pay for col- e and advanced de- es for their three dren: an attorney, a chologist, and an envi- mentalist. But the debt ved too heavy a bur- when the bottom fell of the family income. ough the Feldmans

GERALD AND ELAINE FELDMAN

Nearly a year after Gerald Feldman, 55, lost his job as a director of finance and administration, he and his wife have cashed in their life insurance and sold their jewelry. Elaine, 52, has become the family breadwinner, making \$8 an hour working in collections for a retailer. But they are about to lose the house they have lived in for almost 26 years. Still, they feel their marriage has been strengthened by their ordeal



e cashed in their life-insurance poli- and savings bonds and sold jewelry, don't see any way we can save the se," Elaine Feldman says. "You get discouraged and accept the fact that anything you dreamed of and planned is not there anymore." s neighbors watch friends' houses g foreclosed and sold, they are dras- ly changing the way they live. Even e who haven't lost their jobs are nning to plan for the worst, map- out edgy, defensive strategies in a to maintain some sense of security in suddenly threatening world. Thou- ds of managers and professionals

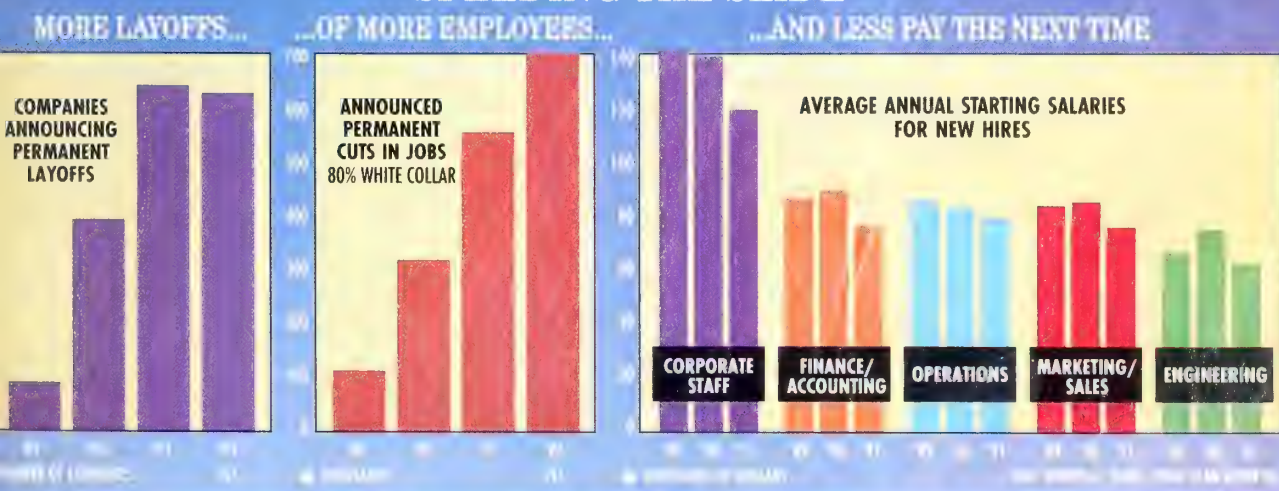
who are still working at their corporate desks are playing "What if?" at kitchen tables with wives and husbands. They are cutting family expenses sharply—some by 50%—and two-income families are trying to live on just one. Saving is vital because job searches have become career searches lasting up to 18 months, triple the average of the early 1980s.

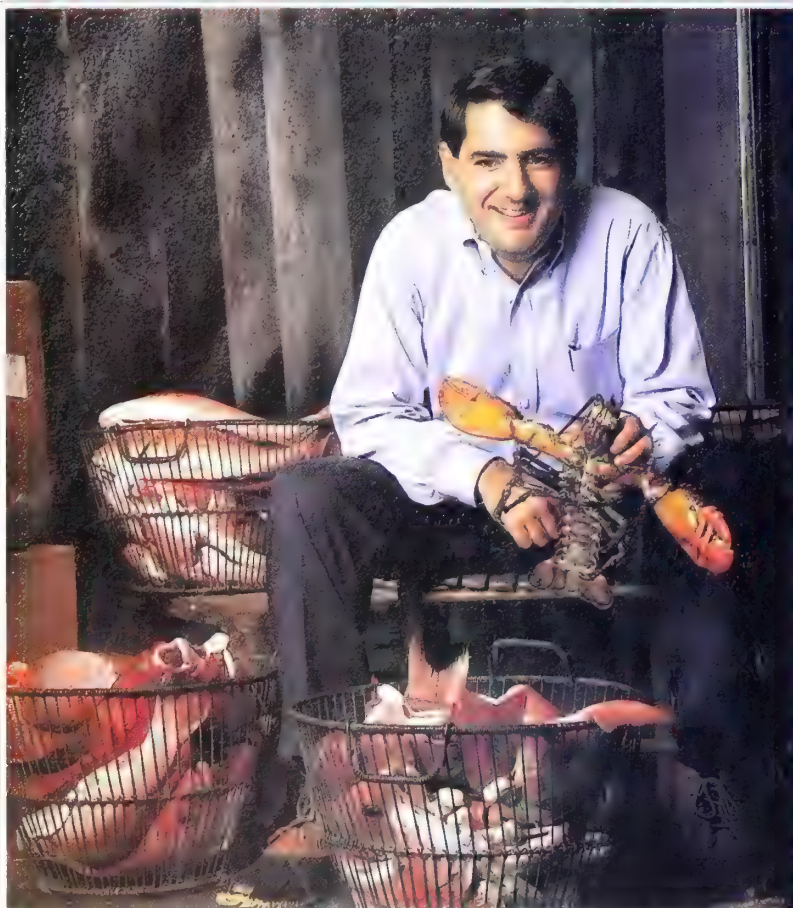
COUPON CLIPPERS. That sort of planning can make the difference between peer- ing over the precipice of downward mo- bility and plunging off it. Stephen Ness of Parsippany, N.J., was making a six- figure salary as a human resources man- ager before he was laid off from Sim-

monds Precision Engine Systems in March, 1991. But he had already lost one job in the leveraged buyout of Beatrice Cos. in 1985, an experience that made him cautious. From then on, the family bought its clothes at discount and clipped coupons for groceries.

Both Ness and his wife, Pat, had been frugal long before the management meltdown struck Corporate America. They started earmarking funds for their children's education about the time they bought their house, 17 years ago. By setting aside separate funds for Jennifer and Michael's education, Ness avoided the need to assume a crushing second

SPEEDING THE SLIDE





JACK KARSON

Just before his bank merged and began downsizing, Karson left and bought into a wholesale fish business. He's starting at the bottom, at the company's West Palm Beach plant. In America's social calculus, handling fish may be a step down from handling loan requests—but as a part-owner, he'll have more control of his own destiny

and people were being laid off all around him. On weekend trip home, Edmonds was asked by son of Birmingham's business leaders, colleagues and friends of his father, to build a program promoting math and science education in the schools. Edmonds agreed, and quit PaineWebber—four weeks before downsizing and fired two of his Harvard B-school classmates. Edmonds left before his annual bonus and gave up about \$90,000 in total compensation. He now makes \$60,000 a year as head of a special mathematics and science program at the Alabama School of Fine Arts, a Birmingham public school that draws its students from all over the state. Edmonds is building a staff and curriculum for 120-student program in grades 9 through 12. "Doing this is very rewarding," says Edmonds. "I have family roots in Alabama. This is home."

ON THEIR OWN. Managers are even trying a bit of a

mortgage on his house when the job market gave out under his feet.

And just as downward mobility can devastate a family, family support—both emotional and financial—can avert a crisis. Ness's wife, for example, is playing a key role in tiding the family over while her husband researches new jobs and perhaps a new career. She went from temporary to full-time work as an administrative assistant at a nearby American Telephone & Telegraph Co. operation, and the family went on her benefits program, saving \$400 a month. Through her efforts and the family's planning, the Nesses have leveled off in their decline, buying time for the climb back up.

For others, the prospect of being kicked off the corporate fast track has led to a questioning of the values of money and materialism. They are rediscovering public-service values that were parked during the gogo 1980s. Occupations such as teaching and social work not only offer new measures of self-worth for people dumped from big corpo-

rations but also often provide a stable, if somewhat lower, niche in the middle class.

Bryson Edmonds, 31 years old, seemed headed for yuppie heaven. The son of a successful engineering executive in Birmingham, Ala., he received an engineering degree from the University of Virginia, an MBA from Harvard business school in 1989, and a job at PaineWebber Inc. in New York in 1990.

But times were tough on Wall Street,

chemistry—transforming themselves from office drones into red-blooded small-business owners. As generations of immigrants have known, owning your own business may be the surest way to climb back into the middle class. Now, it may be the best way to stay there. And owning a business may also be a way to restore the feelings of autonomy and achievement that managers and professionals once had in their work lives at big corporations. At night in their dens, they're

running numbers on franchises and mom-and-pop shops up for sale. Many are talking to parents about going into the family business or tapping the inheritance to start one of their own. "The people who will come out of this are winners are those who successfully start their own companies," says Harvard's Mills. "I mean the 5%—if that—who become entrepreneurs."

One who may make the transition is Jack Karson, who gave up banking for fishmongering. Karson went straight to super-regional bank NCNB Corp.

EUGENE STAHNKE

He turned to a church-sponsored employment counseling center for help when he was laid off after 12 years as a corporate attorney. "They give me emotional support, and just by having a place to go, I'm meeting other people," he says



IT WAS LOVE AT FIRST, SECOND AND THIRD SIGHT.

1990 TEN BEST CARS

Nissan 300ZX/300ZX Turbo

It's not our custom to reveal exact vote counts, but you may as well know that the 300ZX/300ZX Turbo got unanimous votes and some staffers had to be restrained from voting twice. You'll likely want to know why.

The 300ZX represents an all-new Nissan one that brings a modern definition to the oft-misused term "grand touring." As good as the normally aspirated version is, the turbocharged iteration is even better. The word "superb" falls readily to word processor.



1991 TEN BEST CARS

Nissan 300ZX Turbo

Our staff felt the normally aspirated 300ZX didn't have enough zip for the money. But with a blower—the price increase is not substantial—the car won handsily. So we picked the 300ZX Turbo model to accept a Ten Best trophy all alone.

Not surprisingly, smoothly delivered speed has its way with us. We just can't seem to resist its allure. And the 300ZX has the best combination of smoothness, speed, and all-around civility of any car below our \$35,000 cutoff.

How could anyone resist a package that looks this good (see photo) and performs this well: 0 to 60 in 5.9 seconds and a solid 155-mph top speed.

The Nissan 300ZX offers its owner 300 horsepower and the excitement that goes with it. To say nothing of pride of ownership.



Vehicle type: Roadster

1992 TEN BEST CARS

Nissan 300ZX Turbo

As our group of Ten Best voters drove the 300ZX Turbo and compared this two-seat beauty with its competition, the adjective "civilized" once more came into wide use. As well it should, for this car—at what could be defended as a modest \$36,800—brings a new feel to touring in the grand manner. It is particularly rewarding to the enthusiast to see how far Nissan has taken the idea of the sports car. The 300ZX is a distant mechanical relative of the 240Z that appeared twenty years ago, but it remains close in spirit to that ground-breaker.

Nissan's 300ZX line offers you two engines, normally aspirated or turbocharged and intercooled, but unless you're averse to owning the best thing of its kind, at a nominal price penalty, we say get the turbocharged version—which is again the one that gets our Ten Best nod.

For the purest kind of driving satisfaction on that perfect road on that perfect day, the Nissan 300ZX Turbo gets our vote as the perfect car.



Seldom has one automobile inflamed so much passion among the experts as has the Nissan® 300ZX® Turbo. For three years in a row, the Turbo Z® has been named to *Car and Driver's* 10 Best List as well as *Automobile Magazine's* All Stars List. And in the February, 1992 *Car and Driver* comparison, the Turbo Z put to rest any ideas the Chevy Corvette,

Lotus Elan and new Mazda RX-7 Turbo had about coming between us. "No ambivalence... no controversy... we all loved it... the perfection of it completely wins us over," they said. To which we say, "Thanks. It's been a breathtaking three years for us, too."

And they said it wouldn't last.



BUILT FOR THE
HUMAN RACE.®

1983 after getting his masters degree in finance from the University of Alabama. He moved up fast, and by 1990 was vice-president in charge of credit policy for south Florida.

Still, with the industry in turmoil and opportunities shrinking, Karson began to suspect that he didn't have much of a future in banking. "I wanted to control my own destiny," he says. While he was still working at NCNB, he began researching small businesses on weekends and at night. Like many others seeking alternatives, Karson first considered franchises, but decided he didn't like the numbers.

Then he looked at buying into a company. Karson lives in Boca Raton, Fla., so he screened wholesale and service-industry companies that might do well in southern Florida. Four years back, Karson had won Miami-based National Fisheries Inc., a small private seafood wholesaler, as a client for NCNB. The owner wanted to expand. Just months before NCNB merged with C&S/Sovran Corp. and downsized, Karson bought in. He started at the bottom, processing fish at the company's facility in West Palm Beach. In six months, he'll move to headquarters, back to a clean desk. In America's social calculus, handling fish may be a step down from handling requests for loans. But the social escalator may

**MANY NEWLY MINTED
'CONSULTANTS' ARE
JUST DOING MENIAL
WORK FOR CASH
TO PAY BILLS AS THEY
SEARCH FOR A
PERMANENT JOB**



be moving up again a lot faster for Karson than for others.

Another former banker, J. Thomas Byrom of San Francisco, is also hoping that self-employment will give him a way back up the social escalator. Last summer, the 45-year-old was making \$117,000 as senior vice-president in charge of branch analysis at First Nationwide Bank. The Stanford University MBA had spent 18 years climbing the banking ladder and was sitting pretty on an expensive 2.4-acre homesite in the San Francisco suburb of Danville. Then, he found a separation package on his desk one day and left with 3½ months' severance. Byrom is now selling insurance on commission as a Northwestern Mutual Life Insurance Co. agent. His wife, Rebecca, has started a business raising herbs in their garden to craft into wreaths and other gifts. She's hoping for a profit of \$10,000 to \$15,000 next year. So far, Thomas Byrom has sold 15 policies, with a goal of 100 the first year out. That would give him a six-figure income. "It's fun, and I'm committed," he says. "Getting fired will affect my life for the better, even though it will be rocky here for a couple of years."

It's rockier still for the tens of thousands of laid-off managers and professionals going into consulting. Consulting

is one of the fastest-growing occupations in the U.S., but not so much because people are making a good living at it. For many, the term is a polite fiction to cover doing menial work for cash to pay bills while searching for permanent employment.

That kind of "consulting" can be dangerous. A mid-level manager who was laid off from his \$60,000 aerospace-industry job about a year ago found himself driving a limo. At one point, he was putting in 80 hours a week. That left almost no time for the thing that was most important—his job search.

SPIRITUAL AID. If the chill of downward mobility is forcing some to take shelter in self-employment, it's also causing many to seek sanctuary in the church and synagogue. From the Asylum Hill Congregation Church in Hartford to the North Shore Synagogue in Glencoe, Ill., religious organizations are playing a growing role in helping individuals cope. Church-backed centers are helping the congregation members form networks, providing them with job listings, and coaching them on interviewing with recruiters and headhunters. Quietly, many are even lending money to help members pay their mortgages.

Perhaps most important, churches and synagogues are helping their congregations overcome the shame that can accompany layoffs and downward mobility. The First Presbyterian Church of Lake Forest, in a Chicago suburb, set up a Career Resource Center in September, 1990, after one of the church's deacons lost her job in the mid-1980s. "She said

PREPARING FOR THE SL



DOWNSCALE NOW

Start living the New Frugality. Even if you still have your job, cut your cash outflow—especially if you're a two-income family. Prepare a battle plan that assumes you might be laid off tomorrow, out of work for 18 months, and reemployed at 50% less



TURN TO FAMILY

If you do lose your job, it's a family crisis, not just a job problem. You need your family's emotional support—and maybe their financial support, too. Working spouses and children can provide critical emergency income to ease a decline in living standards



RETHINK VALUES

Odds are, your next job will be worse and pay less than your last. Merit, achievement, and loyalty no longer guarantee advancement. So stop totally identifying your status with occupation, income, and expensive toys. Decide how much money is really enough



REACH OUT

Since your next job may be in a completely different industry, work for jobs through organizations that have nothing to do with your current occupation. Try alumni associations, women's and men's groups, gyms. But don't wait until you're laid off before networking

one should go through that experience alone," says Thomas Slocum, a volunteer at the center.

The center has been a boost to Christine Verdonk, who recently saw her family-owned and -operated electroplating business in Chicago go bankrupt. "The principal thing it did was give me support from my neighbors and peers," she says, "especially on the days when I don't feel like getting up." Through the center, a retired vice-president of Amoco Corp. is now helping Verdonk write her résumé.

Eugene Stahnke is getting practical advice from a church-sponsored group in search for new employment. The 45-year-old corporate attorney was laid off in July, 1991, after 12 years at Echo Inc., a Japanese-owned outdoor-equipment manufacturer in Lake Zurich, Ill. Some of the administrative staff at Echo cut with him. The Career Renewal Center of Holy Cross Catholic Church in suburban Deerfield, Ill., is providing Stahnke with an attorney from Chicago firm Ross & Hardies who counsels on the legal-employment market. It also put Stahnke into contact with a communications professor at De Paul University who is helping with interview techniques.

HAMBURGERS AND CHICKEN. Stahnke has asked family members to fight the sudden threat of downward mobility, and they responded by scaling back their lifestyle immediately. Stahnke used his allowance to pay off credit-card balances, and his wife cut the food budget by switching to chicken and hamburger from roast beef and dining out. Only clothes he has bought in the

STEPHEN AND PAT NESS

As a family, they planned for the worst. Early on, they put aside money for their children's education, bought a modest house, and watched their spending. When Stephen lost his six-figure post in human resources, Pat started working full-time. The result: They have weathered the storm of unemployment better than most



past eight months were shirts and a belt for interviews. His wife, Robbi, got a job as a secretary in October at a local steel company. Their sons' parochial school has been letting them pay less than full tuition. So far, they've kept up their mortgage payments.

Coping with downward mobility will be the single most important economic and social conundrum facing many managers and professionals in the 1990s. The era of consumption is gone, replaced by an age of retrenchment, adjustment, and climbing back.

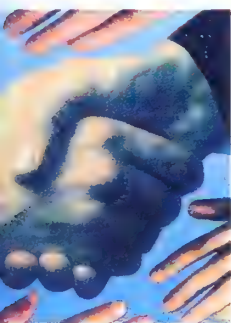
For many, the restructuring of Corporate America may provide opportunities for new careers or new goals. For others,

it can mean the realization of old dreams of entrepreneurship. For a few, the economic changes translate into a simple struggle to stay in the middle class.

Allen Stenhouse still sends out résumés every day. He went on four job interviews in the first week of March alone, including one for a marketing post at Bess Eaton Donut Flour Co. in Rhode Island. He is determined to recapture the piece of the American Dream that he lost somewhere along the way.

By Bruce Nussbaum in New York, with Ann Therese Palmer in Lake Forest, Ill., Alice Z. Cuneo in Danville, Calif., and Barbara Carlson in Hamden, Conn.

AND HOW TO SURVIVE IT



NEW CREDENTIALS

Stay in business, pick up a new language, and add marketable skills as possible. Work on weekends. You still have that well-paying job. Other corporate refusing to graduate school for work or teaching



CALL YOUR PARENTS

Receiving a portion of your inheritance early can make a big difference. In a bad pinch, money from your folks can stop the slippery slide of downward mobility. It can pay the mortgage and the kids' education bills, or provide the capital to start over on your own



WORK FOR YOURSELF

Most executives laid off these days think about owning a business. It's risky—but at least you can't be fired. Start researching franchises, consultancies, mom-and-pop shops, or the family business you didn't want to go into before. Turn a hobby into a business



DO GRUNT WORK

Plenty of people are performing menial work for quick cash to pay bills. It's not the worst thing in the world—within limits. Don't get caught up working 80 hours a week painting houses or driving a limo while neglecting your search for another job

\$4,995



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*U.S. list price for grayscale display with diskless, 8MB of memory. SPECmarks: HP Apollo, 34; Sun, 20.3. MFLOPS: HP Apollo, 8.4; Sun, 3.
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\$4,990



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scale display (Sun only offers a 17" monochrome display on the ELC). And, with over 1,800 applications already available, you're ready to get up and running fast.

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**HEWLETT
PACKARD**



A TALL ORDER FOR THE PRINCE OF BEERS

The son is rising, although Budweiser has slipped a bit. Meanwhile, dad is keeping a tight rein

As the lights dimmed in the Orlando Civic Center's huge auditorium, thousands of Anheuser-Busch wholesalers and salespeople settled happily into their seats and waited for the bimbos to appear. Anheuser-Busch's monolithic Budweiser brand was slipping in sales for the third year running, and the giant brewer had promised a 20% hike in ad spending—meaning Americans could expect to see \$250 million worth of Budweiser marketing support in 1992. In the beer business, more money usually means more babes in bikinis. And that was fine with the roomful of graying wholesalers assembled for their annual October sales bash.

But when the video started, the only woman on the screen was a gussied-up grandmother wielding an electric guitar. The next spot had no women at all, just a weird old Hawaiian guy confounding a group of futuristic young surfers—and the conventioners—by saying “groovy.” This was no way to sell beer, the wholesalers thought with dismay. Recalls George Couch, president of an A-B distributorship in Watsonville, Calif.: “Those ads were met with all the enthusiasm of a cold shower.”

Leaning against the podium when the lights came up was August Busch, nattily turned out with slicked-back hair and a sharp-toed pair of cowboy boots. The resemblance was uncanny, but this wasn't August A. Busch III, chairman of Anheuser-Busch Companies Inc. The man trying to explain that the trendy new ads were designed to lure back young drinkers was the chairman's 27-year-old son, August A. Busch IV. Sure, the new Budweiser brand manager looked like his dad, but was this kid serious with these ads? “Some of us were a little leery,” admits John E. Dickerson Jr., a Monroe (Ohio) distributor.

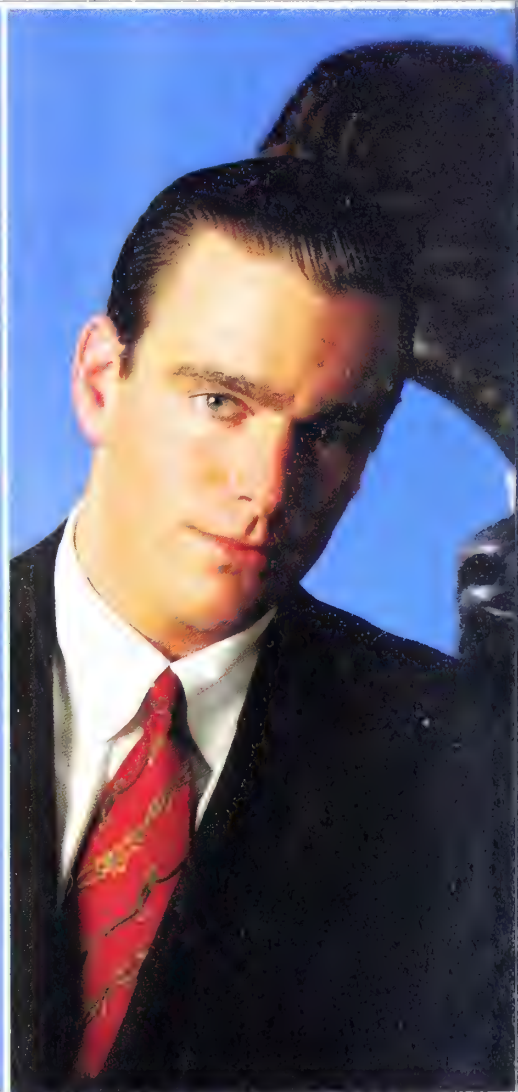
‘WITH-IT.’ Although “the Fourth” was grilled mercilessly that day in Orlando, it turned out the ads he had championed did better in market research than the bouncing bimbos the distributors had wanted. They were so successful among young drinkers, in fact, that a wholesal-

ers' group apologized to the young August at their next meeting, conceding that he was “a lot more with-it” than they were. August III, standing next to his son at the ceremony, permitted a rare, tight smile to cross his face. “Son,” he said, “don't let it go to your head.”

The wholesaler test was the the most public chapter yet in the grooming of Augie—an exacting apprenticeship crafted by August III for his eldest son. It

began with the thimbleful of Budweiser August IV received on the day he was born. Now, young August is manager of A-B's most important brand. The position caps a frothy rise through the ranks of the nation's No. 1 brewery that should be familiar to anyone who watched his father ascend to the chairman's seat during the '60s and '70s. August IV is the fifth-generation Busch to advance the company (table). And as long as

Despite some serious run-ins with the law, August IV gets high marks from company executives for being a quick study. But dad is unwavering: The Fourth must perform to advance



...performing, he has every chance following in his father's footsteps. For now, though, there's no doubt who's in charge of Anheuser-Busch. Interviews with August III, August IV, and many close associates confirm that the father is molding the son in his own image. In the mid-1970s, August III orchestrated the ouster of his own father as CEO when it became clear the old man wasn't up to battling the onslaught of Miller Lite. Now, he appears to be reaching into the future, tapping the next generation through his son.

BLACK STUDY. That's not to say August doesn't have a mind of his own. Despite an adolescence riddled with rich-run-ins with the law, he gets high marks among former and current company executives for being a quick study. The father is unequivocal that August must perform to advance. "There is no guarantee that August has a direct line of succession in this corporation," he says. Adds Joseph Corcoran, the fourth's predecessor as Budweiser's CEO and manager: "Does Aug have an advantage over a guy named Joe Corco-

ran? Yeah. But if he doesn't work his butt off, it won't happen."

Clearly, Augie is getting his chance at a crucial time. The Budweiser brand produced nearly 40% of the publicly traded company's \$12.6 billion in 1991 sales. It poured out about half of its \$1.7 billion in operating profits. For years, Bud has been the brewing industry's behemoth, accounting for one out of every four beers chugged by Americans each year.

Yet the King of Beers faces what could turn into a big problem—namely, three straight years of declining shipments. Bud suffered its steepest drop in 1991, as recession-weary consumers traded down to lower-priced brews, such as Busch and Natural Light, following a 100% hike in the federal excise tax. Industry newsletter *Beer Marketer's Insights* estimates that Bud shipments fell by 5.2% last year, double the industry's decline.

That's why August III keeps his son on a tight rein. Father and son often share long, private conversations commuting by helicopter to and from Waldmeister Farm, August III's 2,000-acre estate in Missouri. August III routinely calls as early as 6 a.m. and sometimes late into the evening to chew over marketing promotions or bounce around ad strategies for Bud. "There's not a day in the week where he doesn't ask me a question or give me a hard time about something," says August IV.

DUCK HUNTING. At a conclave to discuss ads for St. Patrick's Day and the upcoming Summer Olympics, the Fourth rejects a series of possible new rock-concert Bud signs presented by a half-dozen or so creative types from ad agency D'Arcy Masius Benton & Bowles Inc. He shakes his head, looking over the Bud logo rendered in shades of blue, white, and red. "Remember your directives?" he asks. "We got to do it in red, guys, or else we get fried. We can't do something different when he told us so," referring to Dad's insistence that the Bud logo stay red. "If you want to, go upstairs and show it to the chief..." There's nervous laughter all around, and someone says: "Yeah, and I'll watch with binoculars when you do!"

The Fourth's on-the-job training began at 15, driving a forklift at a wholesaler's warehouse. His next job was shoveling Anheuser's trade-



THE BUSCH DYNASTY

ADOLPHUS BUSCH



1839 - 1913

A German immigrant turned Gilded Age tycoon. Took over the brewery in the 1870s from his father-in-law, Eberhard Anheuser. Using advertising and refrigerated railroad cars to expand, pushed A-B past Pabst in 1901 to become No. 1 brewer

AUGUST A. BUSCH SR.



1865 - 1934

Shy and retiring, he shepherded the brewery through Prohibition selling yeast to bootleggers. Also launched nonalcoholic drinks such as Bevo and Kicko Repeal brightened A-B's prospects but not his. Financial and family troubles led to his suicide

AUGUST A. "Gussie" BUSCH JR.



1899 - 1989

A playboy-businessman who had 11 children by three wives. August III engineered his ouster as CEO in 1975. Bought the St. Louis Cardinals baseball team in 1953. In later years, drove a team of Clydesdales around Busch Stadium before games

AUGUST A. BUSCH III



1937 -

A renegade in his early years, he never graduated from college. Became a hard-nosed workaholic who fought off a thrust by Philip Morris' Miller Lite brand. Anheuser-Busch's industry dominance is a tribute to the current CEO's iron will

AUGUST A. BUSCH IV



1964 -

Keeping with tradition, August IV showed his wild side early. After two run-ins with the law, he has toned down, but he still makes the rounds with beautiful women. Rising fast through the brewery

UNDER THE INFLUENCE: THE UNAUTHORIZED STORY OF THE ANHEUSER-BUSCH DYNASTY BY ARTHUR EYES/BW

mark beechwood chips out of tanks used for aging beer. Early on, he learned what it meant to be the boss's son. But unlike his father—who often comes across like a Prussian general—August IV strives to fit in as one of the guys. "I don't think people are scared of me," he says. "If they are, I try to disarm them."

Despite August III's taskmaster approach, father and son have always been close. Each is licensed to fly fixed-wing planes and helicopters, and they love to fly together. They also venture to A-B's corporate retreat on Lake of the Ozarks to race speedboats and like to hunt ducks at Waldmeister Farm.

But August IV has also incited his father's fury. As a 19-year-old student at the University of Arizona, he was involved in an auto accident, allegedly alcohol-related, that resulted in his female companion's death. To make matters worse, Busch left the scene of the accident. Police found him the next morning in his condominium, naked except for a sheet wrapped around him, caked in dried blood. In the condo were a semi-automatic rifle and a sawed-off shotgun. The Pima County prosecutor considered bringing charges of manslaughter and leaving the scene of an accident. August III responded by assembling a crack legal and investigative team in Tucson and St. Louis. An eight-month investigation ended in a dropped case, largely because the hospital lost a blood sample taken from August IV after the accident.

Furious, August III yanked his son back to St. Louis University. "We have to put some discipline into him," he told a school official. Even today, when asked about the accident, the father clenches his fists and lightly pounds a table. "It was tough for a while," August IV says. "That's all I want to say."

PLAYBOY. At St. Louis U., where he studied finance, Busch was diligent and low-key. But outside of school, he gained a reputation as a playboy, hitting the St. Louis bars with beautiful women—most often blondes. As a sophomore, he landed in trouble again. This time, he led undercover narcotics detectives on a late-night chase through downtown St. Louis after an excursion in his father's Mercedes-Benz to a topless bar. The detectives saw a speeding car with tinted windows and suspected him of being a drug dealer. He was accused of trying to

run over a police officer, but in a highly publicized court trial, the jury acquitted him of all charges.

Busch finally started buckling down after graduation. At the brewery, he became the assistant to A-B's top brewmaster. Then, after working as the marketing chief's assistant, he took on his first brand-management job, heading up the national launch of Bud Dry Draft in 1990. To promote the brand, August IV raced the Bud Dry offshore speedboat, reaching speeds of up to 140 mph, before his father "re-

home in St. Louis' tony central west end he usually takes his two dogs: a German shepherd and a new rottweiler pup. But he still makes the St. Louis social scene regularly, and he is seldom alone. Although he announced his engagement to a model named Judy Buchmiller early last year, he backed out of the wedding plans. The two are still dating.

'SOMEDAY.' His most serious relationship seems to be with the family business, specifically Budweiser. And rivals think it will take all his energy. "The new generation doesn't want to drive their father's Oldsmobile or drink the father's Bud," says Robert A. Rec-



AUGIE BROKE OFF HIS ENGAGEMENT TO MODEL JUDY BUCHMILLER. THEY'RE STILL FRIENDS, THOUGH, AND SOMETIMES TRAVEL TOGETHER



AUGIE RACED THE BUD DRY SPEEDBOAT—UNTIL HIS FATHER "RETOWNED HIM"

tired him." The brand was a hit in its first year, but slipped in 1991.

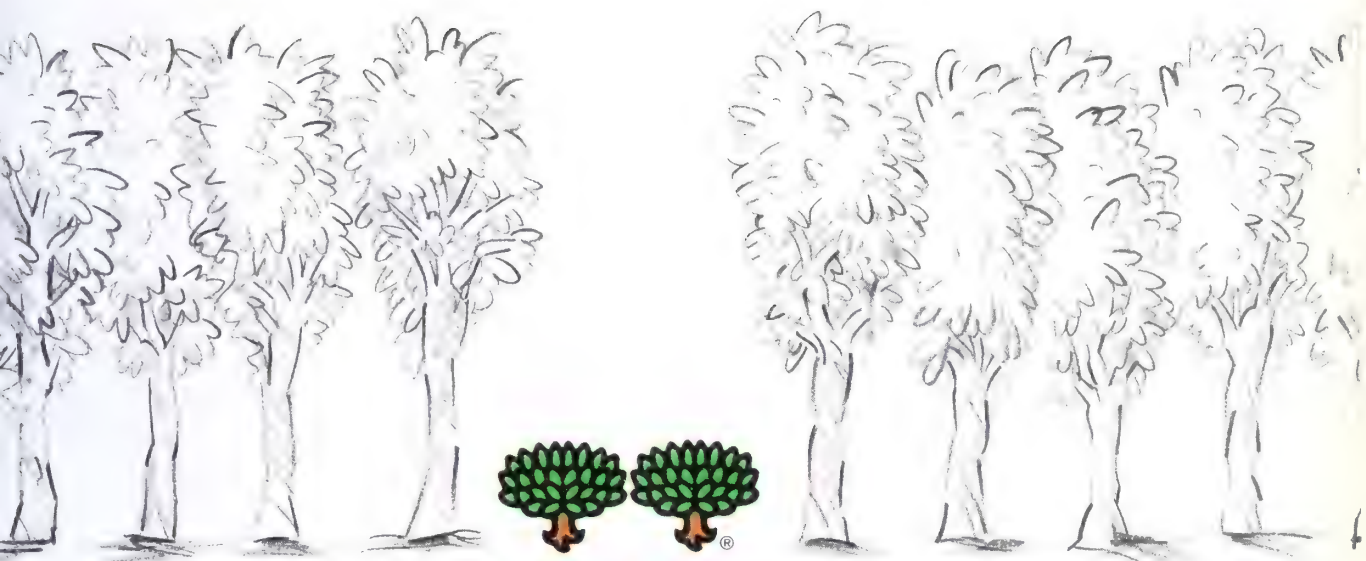
These days, Busch is busier than ever at work—though sometimes it seems like play. His job often entails schmoozing with wholesalers and bar owners. At a pre-Super Bowl bash in Minneapolis, he toured the bars promoting Bud with an entourage of salespeople and Bud girls dressed in tight spandex. There's no letup for the rich young bachelor at home, either. His mother, Susan Busch, who was divorced from his father when the Fourth was 6, says he's so busy that the only time he has to visit with her is on Saturday mornings, when he trains with a personal martial-arts instructor at the company gym. "It's a chance to catch up between punches," she laughs. "I'll take what I can get."

Busch has attained black belts in aikido, tae kwon do, and judo—largely for security reasons. The family has had numerous kidnap threats. When he runs in the park across from his \$380,000

holtz, Adolph Coors Co.'s executive vice president for sales and marketing. Putting a Busch on the case and increasing spending should help with wholesale and retailers, who are impressed by the family's commitment to the brand. And the company hopes the new ads—youth-oriented, less sexist—will appeal to a fresh generation of Bud drinkers. As for bikini-clad babes, A-B still supplies plenty in its Busch and Bud Light ads.

While the Fourth has his work cut out for him, he'll likely have the Third around for a while giving advice—wanted or unwanted. "You're looking at a guy who's 54 years old. I intend to be around here a long time," his father says. Having finally gotten himself under control, August IV would like to "step into my father's shoes someday. But dad's not planning to swap his hand-tooled cowboy boots for slippers until he thinks the time is right."

By Julia Flynn in St. Louis, with Michael Oneal in New York



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PENNEY'S "AUTHENTIC AFRICAN" BOUTIQUES FEATURE GOODS FROM GAMBIA AND SENEGAL

WAKING UP TO A MAJOR MARKET

The 1990 census has spotlighted the power of black consumers

For years, Pamela Chambers mixed and blended her own makeup using various brands. She had to. None of the commercially available foundations the Pittsburgh resident tried was quite right for her mahogany-brown skin. But after a recent trip to the Prescriptives cosmetics counter in a local department store, Chambers went home with a \$28.50 bottle of makeup. "For the first time, I have a foundation that matches my color," she says.

Prescriptives Inc., a subsidiary of Estée Lauder Inc., got Pamela Chambers' business thanks to the All Skins line that it launched last fall. Offering 115 different shades, All Skins hopes for a big chunk of the \$600 million or so black women spend each year on cosmetics. "We want to take care of everybody," explains Sylvie Chantecaille, senior executive of creative marketing at Prescriptives. Chantecaille credits All Skins for a 45% increase

in Prescriptives' sales over the past seven months. Meanwhile, rival Maybelline Co.'s Shades of You, a line for blacks launched last spring, sold \$15 million in its first ten months.

Maybelline and Estée Lauder have joined other corporations such as J. C. Penney, Mattel, Pillsbury, and Quaker Oats in what is shaping up to be a second wave of black-targeted marketing. True, a few leaders in the soft-drink, fast-food, automobile, and alcohol industries have long targeted black consumers, as have a few smaller, often black-

owned niche marketers. But the vast majority of major marketers figured that since most blacks are native English speakers, they'd be effectively reached by mass-market campaigns. As a result, most did little more than sprinkle a few black actors in ads conceived for a white-dominated audience.

The 1990 census changed all that by focusing marketers' attention on the growing importance of minorities. The African-American population is the nation's largest ethnic group (chart). It's growing at twice the rate of whites. And as the white population gets older, the median age of blacks will continue to hover in the 18-to-35 range that many mass marketers covet.

These trends translate into clout. In 1990, African-Americans earned about \$263 billion. "Those are numbers that cannot be ignored," says Amy Hilliard-Jones, who has been revamping Pillsbury Co.'s black-directed marketing. And marketers are increasingly aware that they need to make special efforts to reach that audience. "As we learn more about ethnic marketing, we realize that traditional marketing programs are not as effective as targeted programs," says John Ball, general manager of ethnic marketing at Quaker Oats Co.

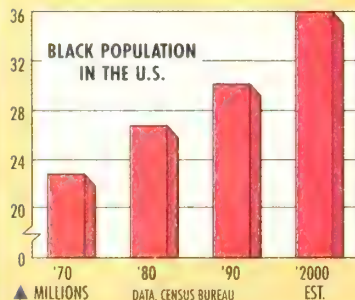
NEW JACK. The challenge is to turn the growing awareness into marketing successes. One way: Realize that "black people are not dark-skinned white people," says Thomas J. Burrell, president of Burrell Communications Group in Chicago, which specializes in marketing to blacks. Looking for insights into the black market, companies such as Toys 'R' Us, Kmart, and Pillsbury have hired black-owned agencies for the first time.

Pillsbury executives, for example, had never gauged blacks' response to the white lumberjack character who hawked their Hungry Jack pancake and biscuit products. When they did, they discovered "there were blacks using our products, but they weren't using them to the same level as the general population," says Hilliard-Jones.

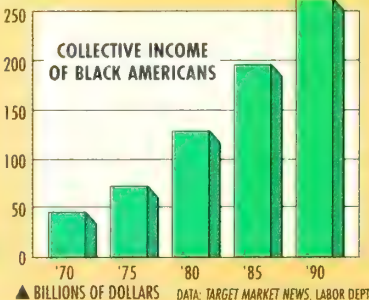
So Pillsbury banished the lumberjack in its ads by black-run agency Uniworld for black consumers. Instead, the ads run a colorful printed slogan, "You look Hungry Jack," and feature a black family eating together.

Some marketers are also trying out new products that tap into rising interest in Africa. Starting last December,

AS THE BLACK POPULATION EXPANDS...



...SO DOES ITS ECONOMIC CLOUT



PORTRAIT OF A QUITTER



I'm embarrassed to tell you how many times I've tried to go cold turkey to quit smoking. But I never really lasted. Sooner or later, I'd start smoking again. Then, my doctor suggested a new approach that includes the Habitrol™ (nicotine) patch.

*'TIL NOW, I NEVER THOUGHT I
COULD REALLY QUIT SMOKING.*



Habitrol is a skin patch. When used as part of a comprehensive smoking cessation program, it has been clinically proven to significantly increase the chances of quitting by relieving the craving for nicotine.

In addition to the smoking cessation program, I was given a free kit. The kit includes tips on getting through the rough times and an audio tape for relaxation and motivation. My doctor is a big support as well. He even gave me a list of support groups I could attend.

Of course, Habitrol won't work for everyone. Only your doctor can determine if it's right for you. If you're pregnant or suffer from any serious disease, be sure to tell your doctor. The most common side effect is skin irritation.

If you're really determined to quit, **ask your doctor** about Habitrol therapy. Or call **1-800-YES-U-CAN**, for more information, today.

If you're tired of quitting and failing, this could be your chance.

IF YOU'VE GOT THE WILL, NOW YOU CAN HAVE THE POWER.

NEW
Habitrol™
(nicotine)

(nicotine)
Systemic Therapeutic System
Systemic delivery of 21, 14, or 7 mg/day over 24 hours

BRIEF SUMMARY. FOR FULL PRESCRIBING INFORMATION SEE PACKAGE INSERT.

INDICATIONS AND USAGE

Habitrol is for oral nicotine replacement therapy to assist in the treatment of nicotine withdrawal symptoms. Habitrol treatment should be used as a part of a comprehensive approach to smoking cessation program.

The use of Habitrol systems for longer than 3 months has not been studied.

CONTRAINDICATIONS

Use of Habitrol systems is contraindicated in patients with hypersensitivity to or allergy to nicotine or to any of the components of the therapeutic system.

WARNINGS

Nicotine from any source can be toxic and addictive. Smoking causes lung cancer, heart disease, emphysema, and may adversely affect the fetus and the pregnant woman. For any smoker, with or without concomitant disease or pregnancy, the risk of nicotine replacement in a smoking cessation program should be weighed against the hazard of continued smoking while using Habitrol systems, and the likelihood of achieving cessation of smoking without nicotine replacement.

Pregnancy Warning

Tobacco smoke, which has been shown to be harmful to the fetus, contains nicotine, hydrogen cyanide, and carbon monoxide. Nicotine has been shown in animal studies to cause fetal harm. It is therefore presumed that Habitrol treatment can cause fetal harm when administered to a pregnant woman. The effect of nicotine delivery by Habitrol systems has not been examined in pregnancy (see PRECAUTIONS—Other Effects). Therefore, pregnant smokers should be encouraged to attempt cessation using educational and behavioral interventions before using pharmacological approaches. If Habitrol therapy is used during pregnancy, or if the patient becomes pregnant while using Habitrol treatment, the patient should be apprised of the potential hazard to the fetus.

Safety Note Concerning Children

The amounts of nicotine that are tolerated by adult smokers can produce symptoms of poisoning and could prove fatal if Habitrol systems are applied or ingested by children or pets. Used 21 mg/day systems contain about 60% (32 mg) of their initial drug content. Therefore, patients should be cautioned to keep both used and unused Habitrol systems out of the reach of children and pets.

PRECAUTIONS

General

The patient should be urged to stop smoking completely when initiating Habitrol therapy (see DOSAGE AND ADMINISTRATION). Patients should be informed that if they continue to smoke while using Habitrol systems, they may experience adverse effects due to peak nicotine levels higher than those experienced from smoking alone. If there is a clinically significant increase in cardiovascular or other effects attributable to nicotine, the Habitrol dose should be reduced or Habitrol treatment discontinued (see WARNINGS). Physicians should anticipate that concomitant medications may need dosage adjustment (see Drug Interactions).

The use of Habitrol systems beyond 3 months by patients who stop smoking should be discouraged because the chronic consumption of nicotine by any route can be harmful and addictive.

Allergic Reactions: In a 6-week, open-label dermal irritation and sensitization study of Habitrol systems, 22 of 220 patients exhibited definite erythema at 24 hours after application. Upon rechallenge, 3 patients exhibited mild-to-moderate contact allergy. Patients with contact sensitization should be cautioned that a serious reaction could occur from exposure to other nicotine-containing products or smoking. In the efficacy trials, erythema following system removal was typically seen in about 17% of patients, some edema in 4%, and droopiness due to skin reactions occurred in 6% of patients.

Patients should be instructed to promptly discontinue the Habitrol treatment and contact their physicians if they experience severe or persistent local skin reactions at the site of application (e.g., severe erythema, pruritus or edema) or a generalized skin reaction (e.g., urticaria, hives, or generalized rash).

Skin Disease: Habitrol systems are usually well tolerated by patients with normal skin but may be irritating for patients with some skin disorders (atopic or eczema skin dermatitis).

Cardiovascular or Peripheral Vascular Diseases: The risks of nicotine replacement in patients with certain cardiovascular and peripheral vascular diseases should be weighed against the benefits of including nicotine replacement in a smoking cessation program for them. Specifically, patients with coronary heart disease (history of myocardial infarction and/or angina pectoris), serious cardiac arrhythmias, or vasospastic diseases (Buerger's disease, Prinzmetal's variant angina) should be carefully screened and evaluated before nicotine replacement is prescribed.

Tachycardia occurring in association with the use of Habitrol treatment was reported occasionally. If serious cardiovascular symptoms occur with Habitrol treatment, it should be discontinued.

Habitrol treatment should generally not be used in patients during the immediate post-myocardial infarction period, patients with serious arrhythmias, and patients with severe or worsening angina pectoris.

Renal or Hepatic Insufficiency: The pharmacokinetics of nicotine have not been studied in the elderly or in patients with renal or hepatic impairment. However, given that nicotine is extensively metabolized and that its total system clearance is dependent on liver blood flow, some influence of hepatic impairment on drug kinetics (reduced clearance) should be anticipated. Only severe renal impairment would be expected to affect the clearance of nicotine or its metabolites from the circulation (See CLINICAL PHARMACOLOGY—Pharmacokinetics).

Endocrine Diseases: Habitrol treatment should be used with caution in patients with hyperthyroidism, pheochromocytoma, or insulin-dependent diabetes since nicotine causes the release of catecholamines by the adrenal medulla.

Peptic Ulcer Disease: Nicotine delays healing in peptic ulcer disease; therefore, Habitrol treatment should be used with caution in patients with active peptic ulcers and only when the benefits of including nicotine replacement in a smoking cessation program outweigh the risks.

Accelerated Hypertension: Nicotine constitutes a risk factor for development of malignant hypertension in patients with accelerated hypertension; therefore, Habitrol treatment should be used with caution in these patients and only when the benefits of including nicotine replacement in a smoking cessation program outweigh the risks.

Information for Patients

A patient instruction sheet is included in the package of Habitrol systems dispensed to the patient. It contains important information and instructions on how to use and dispose of Habitrol systems properly. Patients should be encouraged to ask questions of the physician and pharmacist.

Patients must be advised to keep both used and unused systems out of the reach of

children and pets.

Drug Interactions

Smoking cessation, with or without nicotine replacement, may alter the pharmacokinetics of certain concomitant medications.

May Require a Decrease in

Dose at Cessation of Smoking

Acetaminophen, caffeine, imipramine, oxazepam, pentazocine, propranolol, theophylline.

Insulin

Adrenergic antagonists

(e.g., prazosin, labetalol)

May Require an Increase in

Dose at Cessation of Smoking

Adrenergic agonists (e.g., isoproterenol, phenylephrine)

Cardiogenesis, Mutagenesis, Impairment of Fertility

Nicotine itself does not appear to be a carcinogen in laboratory animals. However, nicotine and its metabolites increased the incidence of tumors in the cheek pouches of hamsters and forestomach of F344 rats, respectively, when given in combination with tumor-initiators. One study, which could not be replicated, suggested that cotinine, the primary metabolite of nicotine, may cause lymphoreticular sarcoma in the large intestine in rats.

Nicotine and cotinine were not mutagenic in the Ames *Salmonella* test. Nicotine induced reparable DNA damage in an *E. coli* test system. Nicotine was shown to be genotoxic in a test system using Chinese hamster ovary cells. In rats and rabbits, implantation can be delayed or inhibited by reduction in DNA synthesis that appears to be caused by nicotine. Studies have shown a decrease in litter size in rats treated with nicotine during gestation.

Pregnancy Category D (see WARNINGS)

The harmful effects of cigarette smoking on maternal and fetal health are clearly established. These include low birth weight, an increased risk of spontaneous abortion, and increased perinatal mortality. The specific effects of Habitrol treatment on fetal development are unknown. Therefore, pregnant smokers should be encouraged to attempt cessation using educational and behavioral interventions before using pharmacological approaches.

Spontaneous abortion during nicotine replacement therapy has been reported as with smoking, nicotine as a contributing factor cannot be excluded.

Habitrol treatment should be used during pregnancy only if the likelihood of smoking cessation justifies the potential risk of use of nicotine replacement by the patient, who may continue to smoke.

Teratogenicity

Animal Studies: Nicotine was shown to produce skeletal abnormalities in the offspring of mice when given doses toxic to the dams (25 mg/kg/day IP or SC).

Human Studies: Nicotine teratogenicity has not been studied in humans except as a component of cigarette smoke (each cigarette smoked delivers about 1 mg of nicotine). It has not been possible to conclude whether cigarette smoking is teratogenic to humans.

Other Effects

Animal Studies: A nicotine bolus (up to 2 mg/kg) to pregnant rhesus monkeys caused acidosis, hypercarbia, and hypotension (fetal and maternal concentrations were about 20 times those achieved after smoking 1 cigarette in 5 minutes). Fetal breathing movements were reduced in the fetal lamb after intravenous injection of 0.25 mg/kg nicotine to the ewe (equivalent to smoking 1 cigarette every 20 seconds for 5 minutes). Uterine blood flow was reduced about 30% after infusion of 0.1 mg/kg/min nicotine for 20 minutes to pregnant rhesus monkeys (equivalent to smoking about 6 cigarettes every minute for 20 minutes).

Human Experience: Cigarette smoking during pregnancy is associated with an increased risk of spontaneous abortion, low-birth-weight infants and perinatal mortality. Nicotine and carbon monoxide are considered the most likely mediators of these outcomes. The effects of cigarette smoking on fetal cardiovascular parameters have been studied near term. Cigarettes increased fetal aortic blood flow and heart rate, and decreased uterine blood flow and fetal breathing movements. Habitrol treatment has not been studied in pregnant humans.

Labor and Delivery

Habitrol systems are not recommended to be left on during labor and delivery. The effects of nicotine on the mother or the fetus during labor are unknown.

Nursing Mothers

Caution should be exercised when Habitrol therapy is administered to nursing women. The safety of Habitrol treatment in nursing infants has not been examined. Nicotine passes freely into breast milk, the milk-to-plasma ratio averages 2:9. Nicotine is absorbed orally. An infant has the ability to clear nicotine by hepatic first-pass clearance, however, the efficiency of removal is probably lowest at birth. The nicotine concentrations in milk can be expected to be lower with Habitrol treatment when used as directed than with cigarette smoking, as maternal plasma nicotine concentrations are generally reduced with nicotine replacement. The risk of exposure of the infant to nicotine from Habitrol systems should be weighed against the risks associated with the infant's exposure to nicotine from continued smoking by the mother (passive smoke exposure and contamination of breast milk with other components of tobacco smoke) and from Habitrol systems alone or in combination with continued smoking.

Pediatric Use

Habitrol systems are not recommended for use in children because the safety and effectiveness of Habitrol treatment in children and adolescents who smoke have not been evaluated.

Geriatric Use

Forty-eight patients over the age of 60 participated in clinical trials of Habitrol therapy. Habitrol therapy appeared to be as effective in this age group as in younger patients.

ADVERSE REACTIONS

Assessment of adverse events in the 792 patients who participated in controlled clinical trials is complicated by the occurrence of GI and CNS effects of nicotine withdrawal as well as nicotine excess. The actual incidences of both are confounded by concurrent smoking by many of the patients. In the trials, when reporting adverse events, the investigators did not attempt to identify the cause of the symptom.

Topical Adverse Events

The most common adverse event associated with topical nicotine is a short-lived erythema, pruritus, or burning at the application site, which was seen at least once

in 35% of patients on Habitrol treatment in the clinical trials. Local erythema after system removal was noted at least once in 17% of patients and local edema in 4%. Erythema generally resolved within 24 hours. Cutaneous hypersensitivity (contact sensitization) occurred in 2% of patients on Habitrol treatment (see PRECAUTIONS—Allergic Reactions).

Probably Causally Related

The following adverse events were reported more frequently in Habitrol-treated patients than in placebo-treated patients or exhibited a dose response in clinical trials:
Digestive system - Diarrhea*, dyspepsia*
Mouth/Tooth disorders - Dry mouth
Musculoskeletal system - Arthralgia*, myalgia*
Nervous system - Abnormal dreams†, somnolence†
Frequencies for 21 mg/day system
*Reported in 3% to 9% of patients
†Reported in 1% to 3% of patients
Unmarked if reported in < 1% of patients

Causal Relationship Unknown

Adverse events reported in Habitrol- and placebo-treated patients at about the same frequency in clinical trials are listed below. The clinical significance of the association between Habitrol treatment and these events is unknown, but they are reported as alerting information for the clinician.
Body as a whole - Allergy†, back pain†
Cardiovascular system - Hypertension†
Digestive system - Abdominal pain†, constipation†, nausea*, vomiting
Nervous system - Dizziness*, concentration impaired†, headache (17%), insomnia*
Respiratory system - Cough increased†, pharyngitis†, sinusitis†
Urogenital system - Dysmenorrhea*
Frequencies for 21 mg/day system
*Reported in 3% to 9% of patients
†Reported in 1% to 3% of patients
Unmarked if reported in < 1% of patients

DRUG ABUSE AND DEPENDENCE

Habitrol systems are likely to have a low abuse potential based on differences between it and cigarettes in four characteristics commonly considered important in contributing to abuse: much slower absorption, much smaller fluctuations in blood levels, lower blood levels of nicotine, and less frequent use (i.e., once daily).

Dependence on nicotine polacrlex chewing gum replacement therapy has been reported. Such dependence might also occur from transference to Habitrol systems of tobacco-based nicotine dependence. The use of the system beyond 3 months has not been evaluated and should be discouraged.

To minimize the risk of dependence, patients should be encouraged to withdraw gradually from Habitrol treatment after 4 to 8 weeks of usage. Recommended dose reduction is to progressively decrease the dose every 2 to 4 weeks (see DOSAGE AND ADMINISTRATION).

OVERDOSEAGE

The effects of applying several Habitrol systems simultaneously or of swallowing Habitrol systems are unknown (see WARNINGS—Safety Note Concerning Children).

The oral LD₅₀ for nicotine in rodents varies with species but is in excess of 24 mg/kg; death is due to respiratory paralysis. The oral minimum lethal dose of nicotine in dogs is greater than 5 mg/kg. The oral minimum acute lethal dose for nicotine in human adults is reported to be 40 to 60 mg (< 1 mg/kg).

Two or three Habitrol 30 cm² systems in capsules led to dogs weighing 8-17 kg were emetic, but did not produce any other significant clinical signs. The administration of these patches corresponds to about 6-17 mg/kg of nicotine.

Signs and symptoms of an overdose of Habitrol systems would be expected to be the same as those of acute nicotine poisoning including: pallor, cold sweat, nausea, salivation, vomiting, abdominal pain, diarrhea, headache, dizziness, disturbed hearing and vision, tremor, mental confusion, and weakness. Prostration, hypotension, and respiratory failure may ensue with large overdoses. Lethal doses produce convulsions quickly and death follows as a result of peripheral or central respiratory paralysis or, less frequently, cardiac failure.

Overdose From Topical Exposure

The Habitrol system should be removed immediately if the patient shows signs of overdosage and the patient should seek immediate medical care. The skin surface may be flushed with water and dried. No soap should be used since it may increase nicotine absorption. Nicotine will continue to be delivered into the bloodstream for several hours (see CLINICAL PHARMACOLOGY—Pharmacokinetics) after removal of the system because of a depot of nicotine in the skin.

Overdose From Ingestion

Persons ingesting Habitrol systems should be referred to a health care facility for management. Due to the possibility of nicotine-induced seizures, activated charcoal should be administered. In unconscious patients with a secure airway, instill activated charcoal via nasogastric tube. A saline cathartic or sorbitol added to the first dose of activated charcoal may speed gastrointestinal passage of the system. Repeated doses of activated charcoal should be administered as long as the system remains in the gastrointestinal tract since it will continue to release nicotine for many hours.

Management of Nicotine Poisoning

Other supportive measures include diazepam or barbiturates for seizures, atropine for excessive bronchial secretions or diarrhea, respiratory support for respiratory failure, and vigorous fluid support for hypotension and cardiovascular collapse.

Safety and Handling

Habitrol systems can be a dermal irritant and can cause contact sensitization. Although exposure of health care workers to nicotine from Habitrol systems should be minimal, care should be taken to avoid unnecessary contact with active systems. If you do handle active systems, wash with water alone, since soap may increase nicotine absorption. Do not touch your eyes.

Disposal

When the used system is removed from the skin, it should be folded over and placed in the protective pouch which contained the new system. The used system should be immediately disposed of in such a way to prevent its access by children or pets. See patient information for further directions for handling and disposal.

How to Store

Do not store above 86°F (30°C) because Habitrol systems are sensitive to heat. A slight discoloration of the system is not significant.

Do not store unpouched. Once removed from the protective pouch, Habitrol systems should be applied promptly since nicotine is volatile and the system may lose strength.

CAUTION: Federal law prohibits dispensing without prescription.
Printed in U.S.A.

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as-based J.C. Penney Co. has tested 20 "authentic African" boutiques in its home and other cities such as Jersey City, N.J., and Cleveland. There blacks represent 50 percent or more of the population. The tiny stores, which are located inside J.C. Penney's, featured clothing, handbags, hats, and other accessories are imported from West Africa. The problem: The stores have sold out nearly all their initial \$250,000 in merchandise. But Penney plans to restock in August rollout in 50 to 150 stores. "Our customers really want this," says M. Ackerman, Penney's operations manager for merchandising. "It's right in a lot of shoppers who don't normally go into our store."

IMPACT? Other marketers are paying attention to stores where many blacks usually shop. Quaker is trying to boost share by targeting grocery stores in neighborhoods its competitors have neglected. "Most inner-city stores are un-



ESTÉE LAUDER IS NOW GIVING BLACK CONSUMERS THE ATTENTION THAT ONLY SMALLER, NICHE MARKETERS USED TO PAY

dermarked," says Ball. Quaker has hired Segmented Marketing Services Inc., a black-owned promotions company, to visit the top stores in black neighborhoods to make sure Quaker products and promotional materials are well-displayed. For Quaker, Procter & Gamble Co., and others, SMSI distributes product samples through 7,000 black churches. SMSI executives say its revenues have doubled in each of the past three years, to more than \$7 million.

Other black marketing entrepreneurs worry about being preempted by established white firms. Olmec Corp. is a New York-based toy manufacturer created by

tries Inc. now have dolls that are more than Barbies in darker plastic. Tyco just introduced Kenya, who comes with beads to adorn her cornrows. Her locks can also be straightened with a "magic lotion." Like a Mattel doll called Shani, Kenya comes in a choice of three complexions—light, medium, and dark. Shani also has a new boyfriend named Jamal.

That was a bit of a blow to Eason. She had been planning to name a doll Jamal. "There's a race to the Swahili dictionary going on," she says. It's also a race to woo an often-overlooked consumer.

By Maria Mallory in Pittsburgh with Stephanie Anderson Forest in Dallas

WE'RE IN THE MONEY.

**A reassuring word to anybody
who's buying
business insurance these days.**

The Home Insurance Company's capital was recently increased by \$125 million. The major share of this is part of a total \$740 million commitment from the Trygg-Hansa SPP Group, one of Europe's leading insurers. Good news, indeed. Because this is precisely what risk managers look for in an insurance company nowadays. Unquestionable financial strength and stability. Ask your agent or broker.

Home Insurance
OLD PROS ON A NEW TEAM

THE DONALD'S TRUMP CARD

He just got a better deal than expected. And if real estate revives...

Donald Trump. The name is a punchline now, associated with the worst of 1980s extravagance, egomania, and greed. Once, the world marveled at the scope and mastery of Trump's megabuck deals. Today, he's widely regarded as a washed-up real estate mogul who has been stripped of his once lustrous possessions.

But watch Trump move through a crowd at the Taj Mahal casino he built. Accompanied by girlfriend Marla Maples, The Donald struts across the gaming floor like a god, not a has-been. People touch him for good luck. One gambler begs him to autograph her slot-machine-playing hand.

For Trump, the old-time swagger isn't empty posturing. He may be down, but he's far from out—and he could re-emerge as a major player if the New York real estate market revives. On Mar. 13, he is expected to conclude the final segments of a massive debt restructuring, which will give lenders the Trump Shuttle airline and hand over 49% of the Plaza Hotel in exchange for a lower mortgage-interest rate.

Yet unlike other ailing developers, such as fellow New Yorker Peter S. Kalikow, he has avoided personal bankruptcy. He has been able to hang on to a major portion of his assets—far more than most people thought possible. These include the core of his real estate and casino properties. Although he gave up a dozen assets (table, pages 76-77), he retains four major holdings, including the Trump Tower luxury high-rise. Plus, he kept half-ownership of three others, notably Manhattan's Plaza Hotel and the Taj.

Trump's capacious ego also remains largely intact. With typical bravado, he says: "You'll never see me sitting in the corner sucking my thumb. The name Trump will be hotter than ever."

Much of the credit for his survival goes to savvy negotiations with lend-

ers by his first-rate lieutenants—particularly his chief financial officer, Stephen F. Bollenbach. Another key factor was the realization by lenders that Trump and many of his key holdings were worth more alive than dead. Tossing them into bankruptcy court would have sharply diminished their value.

In return for the assets Trump is ceding to them, the lenders are reducing his empire's overall debt burden by a third, to \$2.5 billion. That should enable cash flow from his operations to cover his interest tab. The lenders also are lowering his personal debt—the portion guaranteed only by his signature—from \$885 million to \$115 million.

That doesn't mean a return to the flush days of the 1980s for Trump. In the first comprehensive analysis of his holdings since his 1990 near-collapse, BUSINESS WEEK estimates that he has a negative net worth of almost \$1.4 billion (table). Trump disagrees and



WHAT TRUMP OWNS—AND OWES

ASSETS*		MARKET VALUE MILLIONS OF DOLLARS	LIABILITIES		REMAINING DEBT MILLIONS OF DOLLARS
CASINOS			CASINO DEBT		
▶ TRUMP TAJ MAHAL (50%-owned)	\$275		▶ TRUMP TAJ MAHAL		\$933
▶ TRUMP'S CASTLE (50%-owned)	71		▶ TRUMP'S CASTLE		352
▶ TRUMP PLAZA	234		▶ TRUMP PLAZA		259
MAR-A-LAGO ESTATE	12		MAR-A-LAGO ESTATE MORTGAGE		12
PENN YARDS (80%-owned)	165		PENN YARDS MORTGAGE		209
PLAZA HOTEL (51%-owned)	204		PLAZA HOTEL MORTGAGE		425
TRUMP TOWER	155		TRUMP TOWER MORTGAGE		140
TOTAL	\$1,116		PERSONAL DEBT		115
* Not including half interest in Grand Hyatt Hotel, which is pending transfer to Bankers Trust. For other part-owned assets, figures are Trump's share.			BANK BAILOUT LOAN		50
			TOTAL		\$2,495
			NET WORTH		-\$1,379

DATA: BW ESTIMATES



his net worth is a positive \$1.5 billion, but BW's investigation indicates his valuation of his holdings is substantially inflated.

Trump is also on a very short leash with lenders. They are maintaining tight controls on the cash his operations produce. He faces several fierce debt covenants over the next few years, and defaults would permit lenders to seize nearly all of his remaining properties.

WIGGLING TIME. Even so, he has wiggled enough liabilities and hung on to enough properties to position himself for a possible turnaround. He has bought time, and time is on his side. Trump is 45 years old. And most observers predict a slow but steady rebound in New York's stinko real estate market.

Not having a shot at a turnaround seemed all but impossible for Trump. Lenders in effect took control of his kingdom in the summer of 1990. Like other world-class deadbeats with vast resources, he made full use of a perverse

advantage: Lenders didn't dare plunge his wholly owned Trump Organization, or significant pieces of it, into a prolonged bankruptcy struggle. That deprived them of a potent weapon. "They would have had years and years of war on their hands," says Trump.

Values usually diminish drastically when assets are tied up in bankruptcy court—and Trump's were especially vulnerable. With Trump in a drawn-out Chapter 11, the New Jersey Casino Control Commission would likely have yanked his Atlantic City (N.J.) casinos' operating licenses, rendering them near-worthless. Much the same held true for the Trump Shuttle: If it stopped flying while the lawyers wrangled, the franchise would die as passengers fled to more reliable carriers. Lenders also feared that selling off the planes in a recession would fetch a pittance.

In Atlantic City, Trump had another

advantage. While it may be true in few other places, his name remains a magic marketing tool there. And that was the key factor in keeping the three casinos under the Trump Organization umbrella. Mortifying publicity about his marriage, love life, and material excesses only added to the raffish appeal that fascinates the gambling crowd. Prudential Insurance Co., a sizable holder of Taj bonds, initially wanted Trump's name and equity removed from the Taj. The Pru and other Trump-haters relented after a plea from their financial adviser, Wilbur L. Ross Jr., a senior managing director of Rothschild Inc. "The Trump name added value to the casino," says Ross.

OUTSIDE HELP. Still, life for Trump could have been much bleaker were it not for Bollenbach. When lenders demanded that he get a chief financial officer to straighten out his haphazard financial operations, Trump hired Bollenbach, the CFO for Holiday Corp., whom he had spotted on a magazine cover. Bollenbach won such acclaim for his performance with Trump that the financially troubled Marriott Corp. hotel chain has tapped him as its CFO. Trump badly needs a new Bollenbach, who says he's leaving because "the problems here are fixed."

Bollenbach virtually took over operational control of Trump's empire. In talks with lenders, he was quite willing to play hardball. "Trump and Bollenbach threatened to ground the shuttle if they didn't get 100% personal-debt forgive-

ness for it," one banker recalls. The banks refused but ended by compromising. Trump's personal shuttle debt was pared to \$35 million from \$135 million. While Bollenbach handled the details of the debt dickering—something the big-picture-oriented Trump is weak on—Trump seemed mainly concerned

with image. Amid the haggling over the shuttle, the lone detail Trump is said to have focused on was whether his name would stay on the planes' sides. Trump brands that "a false story." His name will soon be replaced by that of USAIR Group Inc., which will run the shuttle for the banks with an option to buy.

Privately admitting they were suckers for Trump's ebullient prognostications in the 1980s, the lenders were anxious not to give Trump too many breaks. In addition to the shuttle, they made off with his Regency Hotel in Atlantic City, his Trump Princess yacht, his Palm Beach condo project, his 28% share of Alexander's Inc. department stores, and two of his mid-Manhattan apartment complexes. Trump's long-standing half-owner-

Lenders admit they were suckers for his '80s projections

ship of New York's Grand Hyatt Hotel, his first big real estate score, is scheduled to go to the banks after snags are worked out with the Pritzker family of Chicago, holders of the other 50%.

Trump was also forced to cut his casino creditors into his action in a major way. He reorganized the Taj last year under a prepackaged bankruptcy—a very quick, debtor-led excursion through court that eases debt load but doesn't disrupt operations. The other two gambling emporiums filed prepacks on Mar. 9. Trump has ceded 50% of the Taj, though he could increase his stake to up to 80% if it produces enough cash to pay off the \$752 million bond debt. He aims to do a carbon-copy deal for Trump's Castle, which has \$287 million in bond debt, not counting bank borrowings. Trump Plaza, with \$225 million in bond debt, is in the best financial shape of the trio, which has relieved him of having to relinquish any voting equity. Instead, he will issue \$75 million in preferred stock to bondholders.

Trump was also able to hold on to his Florida estate, Trump Tower in midtown Manhattan, a half-interest in the nearby Plaza Hotel, and an undeveloped 71-acre tract called the Penn Yards that runs along the Hudson River on Manhattan's West Side.

ENVIRONMENTAL HEADACHE? Nevertheless, some big perils loom that could sink Trump anyway. On June 30, 1993, two mortgages come due: \$140 million for Trump Tower and \$200 million for the Penn Yards. Will the banking syndicates holding the loans, both led by Chase Manhattan Bank, roll them over? If not, Trump has no obvious alternatives, since few banks these days want to make real estate loans. Chase says it's too early to tell what will happen. Trump says Chase will renew the loans. He has a point: Trump Tower, renowned for its peach-marble atrium and 80-foot waterfall, is profitable and current on mortgage payments, which might make foreclosure difficult in court. Judges aren't eager to allow foreclosure on a good property simply because the lender won't renew. And Chase may be leery of grabbing the Penn Yards, a huge tract with possible environmental problems whose planned development lies far off. Says one banker: "Chase doesn't need that on its hands."

Trump faces deadlines on his remaining personal debt, too. This \$115 million, which is interest-free, is due to the banks in mid-1995. Also on that date, he must pony up an additional \$50 million that the banks extended him in 1990 to keep afloat.

Lenders say that under the terms of their agreement, they won't allow

Trump to divert any cash from operations or sales of assets to new ventures or his personal use. The money must go to debt service. The only income Trump receives free and clear is \$3.4 million in management fees to run the casinos—chump change by Trump standards. There's one other potential source of cash: the right to sell 10 apartments in Trump Tower for a maximum take of \$10 million, with any excess going to the banks. Manhattan's soft real estate market, however, makes such near-term windfalls iffy. Fortunately for Trump, his lavish personal expenses are paid for out of Trump Organization revenue, justified as business costs. The banks, which once scrutinized his personal spending, have given that up now that the restructuring is mostly done.

Given all this, how can Trump get back in the game? He will need access to something that's scarce lately even for developers with stellar credit ratings: fresh capital. A partial answer is to make money the old-fashioned way—by inheriting it. Fred Trump, Donald's 86-year-old father, is said to have a net worth of \$200 million. Fred helped launch his son in the 1970s with the Hyatt deal, and the two remain on good terms. While Fred's will isn't public, and neither Trump will comment on it, Donald could receive as much as \$50 million.

maybe more, when Fred dies. Other possible heirs include a brother and two sisters.

What Trump needs most is a restive real estate market. That possibility seems remote today, but historically, it's quite reasonable. Property is cyclical. Very little commercial construction is taking place nowadays, so by the mid-1990s, the glut of New York office and retail space should have abated.

This would allow room for every real estate operator's favorite ploy: more debt restructuring. Trump contends that rising property values will eventually make lenders eager to revamp the loans once again—in his favor—so they can get in on new deals. "Banks made lots of money on Donald Trump," says Richard Roth Jr., chairman of Emery Roth & Sons, an architectural firm. "When the market's back, they'll remember that."

A key Trump aide predicts that Trump expects to pay off the \$115 million of personal debt due in 1995 at a discount. If real estate values do come back dramatically, bankers may be receptive. Because he need not pay interest on the personal debt, they put more importance on the debt collateralized by his remaining property. Says one: "I wouldn't be surprised to see him eventually buy out our claim for 30¢ on the dollar."

To Trump, debt restrictions are necessities he cares about only if



WHAT TRUMP

TRUMP SHUTTLE
TRUMP PALACE APARTMENTS
ALEXANDER'S STOCK
REGENCY HOTEL
3 ATLANTIC CITY LAND PARCELS
PALM BEACH CONDO PROJECT
100 CENTRAL PARK SOUTH APARTMENTS
HELICOPTERS
TRUMP PRINCESS YACHT
GRAND HYATT HOTEL (50%-owned)
PARTIAL INTEREST CEDED
PLAZA HOTEL (49%)
TRUMP'S CASTLE CASINO (50%)
TRUMP TAJ MAHAL CASINO (50%)
TOTAL
*At time of transfer agreement

to. Look at what happened to the \$5.4 million in personal-spending the banks imposed on Trump in 1990. He earlier brushed that off in awarding his son, Ivanka, a \$14 million divorce settlement. "The banks weren't happy," says Trump. "I wanted the kids taken care of." The banks concede that they let him get away with this as they were waiting more important things over the fate of the Trump domain. Since Trump's remaining holdings are top-notch, a market rebound would benefit them early. The Plaza is one of the world's best-known hotels, and he has poured vast sums into updating it. If the market turns and financing becomes available, he wants to convert half of its 804 rooms to condominiums. And if bank restrictions are loosened and all his profit doesn't go toward debt payment, he would split the profits with Citicorp and the other banks owning Plaza equity. Trump's profit potential could be more dramatic on the Penn Yards, the largest tract of undeveloped land in Manhattan. Last year, he won over most community activists and politicians by seal-



■ His work done, CFO Bollenbach is going to Marriott

quarter. Trump Plaza was up sevenfold, to \$7.8 million.

Most analysts agree that economic recovery should bring solid gains for Trump's casinos this year. Although the overall outlook for Atlantic City gambling is clouded by overcapacity, Trump holds 25% of the 12-casino market. The goal is to make his gambling halls look good enough for

Trump to sell equity to the public. Or he might sell one or more of the casinos outright, despite his claims that he won't. The most favorable scenario advanced by Trump-watchers has him selling his 100%-owned Trump Plaza casino, an elegant house favored by high-rollers. If Trump's revenue-growth projections are accurate, the casino might fetch \$385 million by 1995. Such a sale would pay off its \$225 million bond debt, its \$34 million bank debt, and its \$75 million in preferred stock—leaving him a tidy \$51 million profit.

Fanciful? Perhaps not. Trump's gambling parlors are now the best-run in Atlantic City. They had been at a low ebb since the 1989 deaths of three top managers in a helicopter crash. Trump tried to run the places himself, but the recession kept gamblers away, and his irascible style provoked other seasoned executives to quit. Finally, last year, Trump got it right by naming his longtime casino lawyer, Nicholas L. Ribis, as Atlantic City chief. Skilled at handling the harsh Trump temper, Ribis has overhauled the casinos' operations, slicing costs. "I win some arguments," says Ribis, "and Donald wins some, too."

Say what you will about Trump, his no-holds-barred fighting spirit remains. Consider the tussle over subdividing his 17-acre Palm Beach (Fla.) estate, Mar-a-Lago, to raise money. An unloved arriviste in the tony resort, he has faced intense local opposition. If thwarted, he has threatened to sell the property to the Moonies, though they say they don't want it. The plan comes before a skeptical town council on Apr. 16, and the ever optimistic Trump forecasts victory. "They'll do a complete fold-up," says the man who vows never to do one himself. One would hesitate before betting against him.

By Larry Light in New York and Joseph Weber in Atlantic City, with bureau reports

GIVEN UP

Value* dollars	Recipient**
	Citicorp
	Citicorp
	Citicorp
Manufacturers Hanover	
Midatlantic	
First Fidelity	
European American	
Marine Midland	
Manufacturers Hanover	
CIT Group	
Boston Safe Deposit	
Bankers Trust	
	Citicorp
	Bondholders
	Bondholders

*Lender in syndicate of banks
DATA BW



ARE FUND MANAGERS CARVING THEMSELVES TOO FAT A SLICE?

Fees are up, though growth has allowed huge economies of scale

The \$180 million Kaufmann Fund is one hot property. It had a nifty 79.4% total return last year, and investors are now shoveling in money at the rate of some \$500,000 a day. They seem to pay no attention to Kaufmann's unusually high expense ratio of 3.50%. That's what investors pay annually out of the fund for portfolio management, marketing expenses, and overhead. It's more than twice that of the average equity fund. "It's on the high side," admits Lawrence Auriana, one of the portfolio managers. "But we think our shareholders get good value for their money."

Perhaps. But some analysts are wondering whether the fund industry—which experienced a tenfold increase in assets over the past decade—is giving shareholders a fair shake on fees. Says Don Phillips, publisher of *Morningstar Mutual Funds*: "The benefits of the tremendous economies of scale unleashed during the past decade were not shared with fund shareholders."

The numbers tell the story. The average expense ratio on equity funds is up from 1.19% in 1980 to 1.57% in 1991, according to Morningstar Inc. (chart). Although a 0.38% increase doesn't sound like much, it's \$1.4 billion a year on equity-fund assets of \$375 billion.

BANG-UP JOB. During the same period, bond-fund expenses climbed from 0.90% to 1.06%. And that's only the average. For example, 11 government bond funds and five municipal-bond funds have expense ratios of 2% or more. With interest rates on governments running below 8% and high-grade munis below 7%, a 2% expense ratio can eat up as much as one-third of the income that could flow to shareholders.

Mutual funds have done a bang-up job for investors, especially last year when they left the stock- and bond-market averages in the dust. And A. Michael Lipper of Lipper Analytical Services Inc. notes that funds provide money management at far less cost to consumers than

such alternatives as individual money managers, banks, and insurance companies. Measured in constant dollars, the average equity-fund shareholders are paying about the same advisory or management fees as a decade ago, says Charles Dornbush, chief financial officer of the Fidelity Funds. Nonadvisory expenses are up about 18%, but, he adds, "10 years ago, you didn't have 24-hour

est funds—Growth, World, Small Companies, and Foreign—voted to raise the base fee to 0.75% from 0.50%, the same as Templeton's newer funds. Says Daniel Calabria, president of Templeton Funds Management Inc.: "Those fund fees have never been raised." Even with the hikes, he adds, the funds will still have below-average expense ratios.

HEAVY LOAD. The funds say fee changes are based on performance and industry norms. Gordon H. Silver, senior managing director at Putnam Cos., points to a consultant's study that looked at 29 Putnam funds and recommended hikes of 12, decreases for 9, and no change in 5. Fees on 5 Price funds were increased, and they were lowered on 4 funds.

But one component of the expense ratio was almost nonexistent 10 years ago and today comprises 15% of fund expenses, some \$100 million. That's the

"12(b)-1 fee," named for the Securities & Exchange Commission rule that enables funds to levy it. About half of all funds use these payments, which let them tap assets to pay for marketing expenses—mainly broker commissions for selling the fund to individual investors.

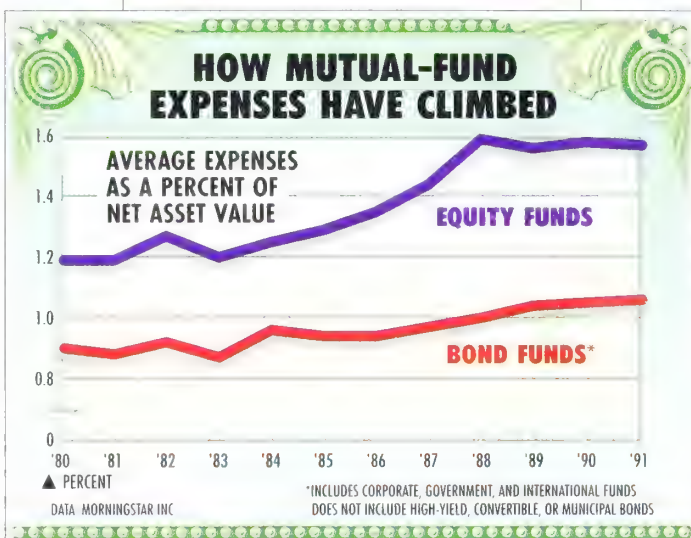
In effect, this allows the fund to reduce the sales charge, or "load"—the broker's up-front payment. That appeals to investors who are increasingly wary of paying high loads. But an up-front load is a one-time charge, while the 12(b)-1 fee is an ongoing expense. The broker gets a commission as long

as the client stays in the fund. Consider an investor in a fund that earns, say, 10% a year and charges an annual 12(b)-1 fee of 0.50%. After 10 years, those little fees add up to the equivalent of an 8.5% load.

Ironically, the idea behind the 12(b)-1 fee was that by spending fund assets on marketing, the funds could attract more money. With more assets under management, the funds would achieve economies and thus would lower shareholder expenses. The SEC staff has been studying the effects of the 12(b)-1 for five years but has not yet sent any proposed changes to the commission.

No one should rule out investing in a fund just because it has a high expense ratio. After all, a fund's performance is what counts. Last year was a phenomenal year, and expenses hardly dented investors' bottom lines. But 1992 is shaping up as a year of more modest returns, and high expenses could weigh more heavily on shareholder profits.

By Jeffrey M. Laderman in New York



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True, there's no industrywide move to raise management fees—the money that goes to the portfolio manager and his research and support staff, which accounts for roughly half of total expenses. But despite sharp competition in the industry, these fees are not coming down as they are in the pension-fund business. "Perhaps that's because pension-plan sponsors pay attention to fees," notes Charles Trzcinka, a finance professor at the State University of New York at Buffalo.

Fund companies can't hike their management fees unilaterally. They need the approval of the funds' outside directors and shareholders, who have recently been generous. They have generally O.K.'d increases in management fees when requested by such companies as IDS, T. Rowe Price, Putnam, Smith Barney, and Templeton. Shareholders of Templeton Funds' four oldest and large-

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BY GENE G. MARCIAL

GLYCOMED ISN'T JUST ANOTHER SHOOTING STAR

Like a bevy of other biotechs, Glycomed has ridden the Wall Street roller coaster. The company went public last June at 7 a share. Then the stock caught fire, zooming to 25 by early January. A month later it was down to 13. Is Glycomed one of those flash-in-the-pan biotechs?

"I wouldn't count Glycomed out. It's in the process of exploiting a yet-untapped source of new drugs," says investment manager Walter Channing of CW Group, which oversees assets of \$200 million. The company is developing therapeutics derived from complex carbohydrates, or chains of sugar molecules, which could be used to control cell proliferation, blood clotting, and inflammation. Several other big investors have started buying shares in recent weeks, pushing the stock to 15. Although they expect the company to stay unprofitable for several years, they are betting on the potential of Glycomed's carbohydrate technology.

"The company should continue to make significant progress in commercializing its products," says analyst Jacqueline Siegel of Hambrecht & Quist. One big source of encouragement: Eli Lilly and Genentech have taken early equity stakes in Glycomed and have been funding some of its research and development projects.

Lilly, which now owns 7.9% of the stock, signed a collaborative pact with the company on the production and worldwide marketing of carbohydrate-derived products. The drugs would treat vascular restenosis, a narrowing of a blood vessel triggered by angioplasty or cardiovascular surgery, and atherosclerosis, a disease that narrows artery vessels. The pact signed by Genentech, which owns a 6% stake, relates to the development of carbohydrate-derived products that would treat certain inflammatory and immune disorders.

TRIAL RUN. "Six of Glycomed's drug candidates are already in preclinical evaluation," says Channing. The two most advanced: a chemically derived compound called GM1-077, which would prevent restenosis, and a compound called GM6-001, which would prevent corneal ulceration. Other carbohydrate-based products being developed by the company seek to treat clotting dis-

GLYCOMED: DOWN BUT NOT OUT



orders, viral infections, and wounds.

Channing believes Glycomed will file with the Food & Drug Administration fairly soon its first IND (investigational new drug) application on GM6-001 to pave the way for clinical trials.

The company's stock is very undervalued, says Channing, and will be "a definite home run." He sees the stock hitting new highs in a year.

One big investor links the recent move in the stock to new whispers that Glycomed will shortly announce a new pact with two big drug companies. He says the new pacts will be similar to the Lilly and Genentech deals and will also include equity stakes in Glycomed.

ATTEN-HUT! IT'S THE SWISS ARMY WATCH

Remember those big Soviet wristwatches that attracted the fancy of Americans at the height of *perestroika*? Well, now get ready for the big Swiss Army watches. They're starting to get hot, and so is the stock of Forscher Group, the exclusive distributor in the U.S. of the Swiss Army knife and watch.

Some smart investors have been picking up shares of Forscher, even after the company's secondary offering on Mar. 9 of 1.6 million shares—priced at 11½ a share. Some big institutions wanted more, so the stock jumped to 13 the very next day.

Money manager Ed Antioian of Delaware Management has acquired a 5% stake and thinks the stock is undervalued even at 13. "The company is back on the fast-growth lane" after a slow-down last year, says Antioian. He fore-

casts 1993 earnings of \$1.30 a share, up from his estimated \$1 for 1992, and 45¢ for 1991.

New products and expanded distribution in the U.S., says Antioian, will help spur growth. Forscher will market more styles of Swiss Army watches, priced at \$115 to \$750 each. "The watches alone will contribute \$10 million in sales this year, up from \$4 million in 1991," says Antioian. The products are sold mainly to retailers, such as Wal-Mart Stores and Macy's.

Another giant retailer, Kmart, is expected to start carrying Swiss Army products this year. One big investor says that Forscher and Kmart executives have had talks about a deal. One Kmart agrees, "its order could be as big as 7% of Forscher's sales," says this pro.

CLEANING UP BY CLEANING UP?

Mercer International has gone a long way since its start in 1968 as a real estate investment trust in Massachusetts. It recently shed its REIT business and has redirected its focus overseas, to Germany where it aims to be big in environmental cleanup. These changes, including possible plans to sell its remaining financial-service operations, have its stock rising: It's up to 7¼ a share from 4 in October.

"The stock is terribly cheap, based on the present management's buildup of the company's income base," says investment adviser Andrew Brichant of Howard Bronson. He sees the stock leaping to 15 a share, based on his 1992 earnings estimate of \$1 a share, up from an expected 75¢ in 1991 and 1990's 54¢. His 1992 earnings number doesn't take into account what Mercer will reap from cleanup operations, which will be concentrated largely in eastern Germany.

Mercer Vice-Chairman Bill Atkinson figures that the German operation alone should kick in sales of \$20 million this year and \$38 million in 1993, bringing total revenues to \$105 million in 1992 and \$150 million next year. Mercer acquired a German environmental services company last year.

Rumors are that Mercer is in talks with some companies about selling its financial-services assets, including Canadian insurance company, worth about \$34 million. Mercer will keep its 80% stake in Nalcap Holdings, a profitable Canadian iron-ore mine.



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THIS BRAWL COULD COST CAT A COUPLE OF ITS LIVES

Even if the UAW ends its strike soon, Caterpillar may be the loser

Last year, before the United Auto Workers began negotiating what it thought would be identical labor agreements with Deere & Co. and Caterpillar Inc., the union anticipated smooth sailing at Cat and choppy seas at Deere. The cooperative relations forged with Cat after a near-ruinous 205-day strike that began in 1982 would make all the difference, union leaders thought.

What they overlooked was Donald V. Fites, Cat's new chief executive, who after a long career in marketing was negotiating his first union deal. Fites had taken over the construction-equipment maker in mid-1990 determined to whip it into shape. First, he sliced its bloated \$2.4 billion in overhead. Then, despite improved factory relations, he went after labor costs. Fites rejected the terms of a new pact that Deere accepted last fall and has continued to do so throughout a five-month selective strike involving some 11,000 of Cat's 16,500 unionized workers.

Now, it looks as if Cat could lose its gamble. Its strike losses—nearing \$100 million so far—could take years to recoup. And though there's always a chance that Cat could salvage the situation, Fites is showing signs of distress. On Feb. 19, with negotiations going nowhere, the company withdrew its central demand for the right to negotiate separate agreements at its 17 profit centers. But that failed to jumpstart talks. UAW officials are determined to maintain the principle of "pattern" bargaining and still insist on a Deere-like deal.

If this goes on for much longer, Cat could emerge from the battle with little to show except disgruntled

workers. Already, the showdown has damaged the cooperative relations that have helped Cat raise its productivity by 30% since 1986. Says Jay Roberts, president of UAW Local 786 in York, Pa.: "The animosity they've created will have long-term repercussions." On Mar. 6, Cat raised the ante even more by declaring a formal impasse—typically a sign that a company plans to impose its latest con-

tract offer. This could be a bluff to get the union to budge. But if Fites follows through, the UAW would likely respond by striking the 50% of Cat's capacity that remains open. And that could drop the company's two-month inventory to the midst of its best selling season.

Fites has taken his hard stance out of a desire to avoid the type of battering Cat suffered during his first year in the driver's seat. The company's chief negotiator, Jerry L. Brust, points out that 60% of Cat's \$10 billion in sales are made overseas—and 37% of those sales are exports from the U.S. So when the dollar climbed 21% against the yen in 1991, it helped knock Cat's 1990 profits down 58%, to \$210 million.

CURRENCY HEDGE. Brust says Fites is worried that another swing in the dollar could leave Cat's profit margins vulnerable to price competition from Japanese

rival Komatsu Ltd. Fites, who declined to be interviewed, wants to hedge against this eventuality by limiting any increase in his \$32.35 his average worker earns in hourly compensation. His latest set of proposals includes smaller pay hikes than Deere granted last fall, plus other wage concessions for specific groups of workers (table). He also wants smaller increases than Deere accepted in pension and health benefits. This, says Brust, is "what it will take to be globally competitive."

UAW officials don't buy that. Even Brust estimates Cat's own proposal would push its labor costs up \$150 million over three years. And the difference between that and what it would have cost to accept the Deere deal may have already been eaten up by strike losses. Analyst Tom M. Levkovich, who follows the construction-equipment industry for Smith Barney, Harris Upham & Co., says Cat could lose more than \$100 million in the first quarter of 1992, mainly because of the strike. He also figures that at least part of Cat's 1991 loss of \$404 million reflected the walkout.

If that's the case, what's Fites after? The answer could be a much bigger prize. Initially, Fites gave



HARD FEELINGS: WILL PRESTRIKE PRODUCTIVITY GAINS SURVIVE?

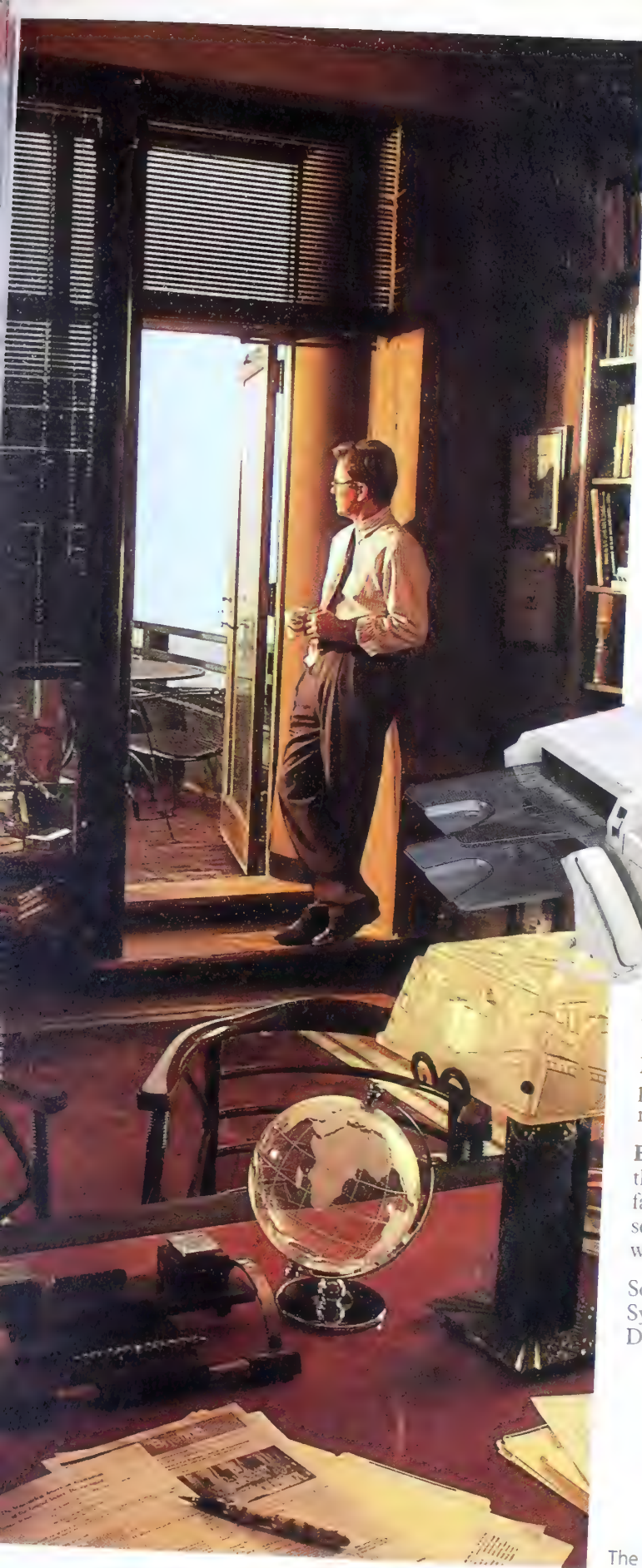
CATERPILLAR VS. THE UAW

What separates the two sides

	Company proposal	Union proposal*
WAGES	One 3% wage hike for 12,800 of Cat's 16,500 union workers	One 3% wage hike for all workers, plus two onetime payments of 3% each
	Lower pay for new hires at parts-distribution centers	Same wage scales for all union workers
BENEFITS	Medical co-payments and a preferred-provider plan	A traditional plan with no co-payments
JOB SECURITY	Employment levels can fall by attrition	Guaranteed number of union jobs

*Based on contract won at Deere last year

DATA: BW



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the UAW two examples of the type of concessions he wanted. He proposed only cost-of-living increases for 3,700 lower-skilled workers throughout the company, arguing that they earn more than similar employees at other companies in the area. He also proposed lower wage scales for new hires in Cat's four parts-distribution facilities. In his latest proposal, Fites kept these demands and added a third for workers at another location. But he dropped his insistence that management be allowed to continually negotiate cut-rate deals over the next three years at other profit centers.

That sudden softening in what the UAW had viewed as Cat's central demand has now focused attention on the other major issue: job security. Cat has cut its work force by 24,000 since 1979. So the union wants it to maintain its current number of jobs during a new pact, as Deere will. Instead, Fites is insisting on a plan that only guarantees individual workers their jobs, which would let Cat cut its work force by attrition. Brust argues that the UAW "should stand the test of the marketplace just like us."

UNITED FRONT. But UAW officials see a hidden agenda. The average Cat worker is 46 years old, and more than 60% of Cat employees will be eligible to retire within six years. When that happens, union leaders say, Fites's proposal would let Cat shrink its work force—and perhaps even shift some vacant jobs to nonunion suppliers. The UAW wants no part of that.

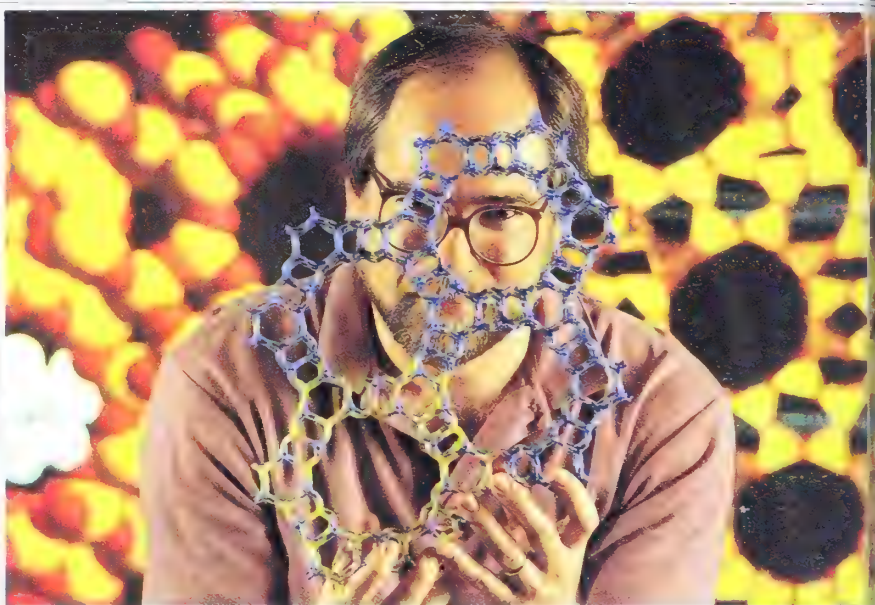
If UAW leaders hold firm, as seems likely, Fites has some big decisions to make. His bottom line may be to match Deere on pay if he gets some give on job security. But there are no signs of cracks in the UAW's rank and file. And a total shutdown would almost certainly hurt the company's market share, which has remained at 30% of worldwide construction-equipment sales even during the walkout. Indeed, several Cat dealers say they're worried about running out of some equipment by May. If that happened, Cat might be tempted to hire replacement workers. But the consequences would be huge. Many Cat employees are highly skilled and not easily replaced, particularly since several plants are in semirural areas that lack large work forces.

Even if none of that happens, the damage is going to be bad enough. It took years of painstaking work by Cat managers to offset the ill will caused by the 1982 strike. Now, that achievement has been undermined. Fites isn't yet playing an all-or-nothing hand. But unless he performs a miracle at the bargaining table, his company could emerge even less competitive than it was before it decided to fight.

By Kevin Kelly in Peoria, Ill.

Science & Technology

CHEMISTRY



DAVIS: DEVELOPING A STURDY "MOLECULAR SIEVE" THAT WOULD REFINER CRUDER GRADES OF OIL

BETTER LIVING THROUGH—CATALYSTS?

Recent advances may lead to new miracle drugs and more

For the past 10 years, between teaching budding chemical-engineering students at California Institute of Technology, Professor Mark E. Davis has repaired to his campus lab to play with piles of sand. Davis' specialty is zeolites—grains made of silicon, aluminum, and oxygen that are used as catalysts in oil refining. Molecules of crude enter thousands of tiny holes in zeolites, where they react with an acid and break down into gasoline, heating oil, and various byproducts. Davis' goal is to create synthetic zeolites with bigger pores to accommodate the large oil molecules in the heaviest crude. Enlarging these pores by just a billionth of an inch could be a big deal: The National Research Council says a 1% increase in the gasoline-making efficiency of catalysts would save 22 million barrels of oil a year and cut the U. S. trade deficit by more than \$400 million.

The prospect of this and other payoffs has lit a burner under chemistry labs around the country. For decades, new catalysts have been developed mainly by trial and error. Scientists knew that they worked without understanding how. But recent advances in lab equipment, such as the scanning-tunneling microscope,

have provided the first glimpse of how individual atoms are arranged on the surfaces of catalytic materials.

This knowledge is turning what has long been an art into a science aimed at designing catalysts for specific jobs. Among the many advances this could eventually lead to are miraculous new medicines, "nanoscale" computer circuits, and more efficient solar-power devices. And instead of just cleaning up pollution, "designer catalysts" might avoid it in the first place. "We can now design catalysts to make only a product—without polluting byproduct," says James A. Cusumano, president of Catalytica Inc., a catalyst maker in Mountain View, Calif.

GOLDEN AGE? Catalysts are the marriage brokers of chemistry: They help form new chemical bonds in other materials. To make a desired product, then emerge unchanged and ready to start over again. Products made this way already represent about a quarter of America's gross national product. Industrial catalysts turn chemicals into everything from plastics to paint to drugs. And biological catalysts, called enzymes, help make food, drink, and detergents. Now, the latest advances indicate that the h-

of catalysts may lie just ahead. Zeolites are a case in point. Nature's zeolite is dug from rock quarries. But chemists such as Davis are crystallizing synthetic varieties from different materials. For instance, one way to get the bigger pores for processing heavier oil is to substitute phosphorous for silicon in a zeolite's structure. For the moment, such synthetic molecular sieves, as they're called, can't stand the pressure and heat of re-

fining. So Davis is trying to make larger-pored sieves from synthetic zeolite. He and others are also designing zeolite membranes that would streamline the refining process by separating oil products in one step. Currently, energy-intensive distillation columns vaporize oil and cool the resulting gases to separate the products.

Zeolites can do many other things, too. They're replacing phosphate phosphates as water softeners in laundry detergents, where they act as molecular sponges to soak up minerals that make water hard.

Meanwhile, some scientists hope to turn sieves into electronic and optical devices. One goal is making chemical sensors that would trigger an alarm when molecules of a particular gas or liquid entered their pores. Another use, says Geoffrey Ozin, a chemist at the University of Toronto, might be to make tiny semiconductor transistors, or switches, that have superior electronic and optical properties compared with those of semiconductors.

But for all their diversity, zeolites can't match the exquisite precision of enzymes. These biological catalysts influence all chemical reactions in the body—and some make it. The ability of enzymes to break down carbohydrates and process sugars, for example, helps in making

beverages, and stain-eating detergents. And now, enzymes are finding more exotic uses.

Celgene Inc., a biotech company in San Diego, N. J., has built a library of 7,000 antibodies, or microorganisms that contain enzymes. Among these is a bacteria that attacks methylene chloride, a carcinogen on the Environmental Protection Agency's most-wanted list. Placed in a reactor in a factory waste stream—at General Electric Co. plant so far—microbes convert the toxin into carbon dioxide, water, and salts.

Celgene is also using enzymes to purify drugs. The key molecules in many drugs occur in two slightly varying forms, each of which may have hugely different effects. The birth defects caused by thalidomide, normally a sedative, may result from one of these variants. Eliminating the undesirable form is usually difficult and costly. But Celgene has found enzymes that can do the job quickly and cheaply. Celgene says the

at Berkeley, "you have many more opportunities to cure illness." Some 50 abzymes have been developed so far, including one that may fight skin cancer by repairing DNA damage caused by ultraviolet light from the sun.

Meanwhile, scientists are using light and sound as catalysts. In photosynthesis, sunlight acts as a catalyst to spur chlorophyll-containing cells to make food for plants. Now, researchers at Arizona State University and Argonne National Labs, to name two, are close to capturing the energy generated by this molecular activity. Says Devens Gust, a professor at Arizona State: "What we have is a solar battery that, in principle, you could use to drive anything you want."

In another form of photocatalysis, scientists from the National Renewable Energy Lab in Golden, Colo., and from Sandia National Laboratories in Albuquerque, are purifying groundwater contaminated by the solvent trichloroethylene, which is used in cleaning machinery. The water is run through tubes containing titanium dioxide crystals. Sunlight reacts with the crystals to degrade the contaminants into harmless products. Project Leader Hal Link at the National Renewable Energy Lab points out that existing methods of cleaning groundwater merely transfer toxins onto filters or into the air.

Scientists are even looking to high-frequency sound waves, or ultrasound, to spur catalytic reactions. When such sound is radiated through liquids, it causes gas pockets to expand and collapse within fractions of a second. This creates tiny spots as hot as the surface of the sun—9,600F—plus pressures equal to those on the sea floor. These conditions might make catalysts work better in many production

processes. Indeed, chemist Kenneth S. Suslick at the University of Illinois at Champaign-Urbana has used ultrasound to make a purer form of "amorphous" iron. Amorphous metals are used in magnetic recording heads and as a corrosion-resistant coating.

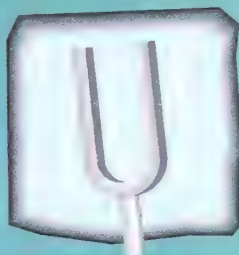
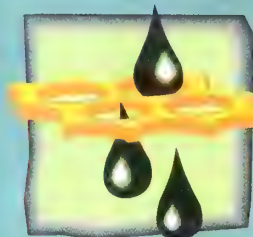
From oil to ultrasound, catalysts have come a long way. And as chemists learn more about how catalysts work and edge closer to designing them from scratch, they'll be building a lot more than castles in the sand.

By Pamela J. Black in New York

WHAT'S NEW IN CATALYST RESEARCH

MOLECULAR SIEVES

Scientists are working to make more efficient versions of zeolites, and other tiny crystalline sponges. These molecular catalysts are not only used in developing better products, but also in refining oil and making chemicals and polymers.

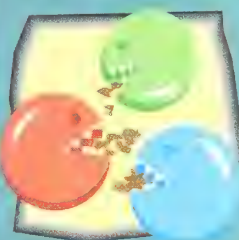


SONOCATALYSIS

By using high-frequency ultrasound to generate intense heat and pressure, it could be used as a controlled, low-cost catalyst for processes such as making purer specialty metals.

PHOTOCATALYSIS

Research into how light acts as a catalyst and works on other catalysts is leading to new ways to purify contaminated groundwater. Understanding artificial photosynthesis could also yield more efficient solar energy devices.



ENZYMES

Increasingly, these natural and engineered proteins are used to "clean" pollution and purify pharmaceuticals. Hybrid versions of them, called catalytic antibodies, could lead to new medicines and cancer drugs.

market for purifying drugs this way may exceed \$3 billion within a decade.

An even more dramatic development is the engineered abzyme, or catalytic antibody. This technology gives antibodies—disease-fighting proteins—the ability to enhance chemical reactions the way enzymes do. Since antibodies can be tailored to latch on to almost any molecule, abzymes could enable scientists to change almost any chemical reaction in the body. "Once you can custom-tailor enzymes," says Peter G. Schultz, a chemist at the University of California

Developments to Watch

EDITED BY FLEUR TEMPLETON

THE SPRUCE GOOSE WOULD LOOK LIKE A TINKERTOY NEXT TO THIS



Operation Desert Storm proved once again that transporting armed forces and heavy equipment quickly to far corners of the world isn't easy. Stephan F. Hooker, president of Aerocon Inc. in Arlington, Va., has a solution: a giant so-called wingship that could lift far more weight than a conventional airplane.

The chubby, stubby-winged craft would fly just 15 to 100 feet above the ocean, taking advantage of the cushion of dense air near the surface. Funded by the Defense Advanced Research Projects Agency, Aerocon calculates that a 550-foot-long wingship could zip along at 500 mph with a cargo of 2,000 troops and dozens of helicopters and tanks. Hooker also wants to collaborate with Russian engineers who have long been researching similar giant flying machines. But there's a hurdle: the price for each wingship could run to \$600 million—as much as a B-2 bomber.

GETTING TO THE BOTTOM OF GROUNDWATER POLLUTION

Predicting groundwater contamination is essential for protecting water supplies. To locate toxic seepage, geologists use flow meters and special tests that isolate small sections of a well. But scientists at the Energy Dept.'s Lawrence Berkeley Laboratory in Berkeley, Calif., and the National Co-operative for the Storage of Radioactive Waste in Baden, Switzerland, have devised an improved groundwater-monitoring system, dubbed "hydrophysical logging."

Berkeley hydrologist Chin Fu Tsang and his team developed a computer program called BORE that analyzes the hydraulic properties of underground rock and predicts how quickly contaminants will move from a given point of origin. The software evaluates data from fluid logging—a technique that measures the chemical changes to de-ionized water that has been pumped into a borehole. By monitoring or "logging" these changes, scientists can determine the source and volume of groundwater pollution.

The new system, 10 times faster than most tests and more accurate than flow meters, is being used in Switzerland to study possible underground sites for nuclear-waste disposal. And GZA GeoEnvironmental Inc. in Newton, Mass., is using BORE to evaluate pollution in shallow wells in the U.S.

YOU'LL FEEL A LITTLE PINCH, AND WE'LL HAVE RESULTS IN A MINUTE

The need for physicians to send blood samples off for laboratory tests often slows diagnosis. Now, i-STAT Corp. in Princeton, N.J., has developed a pocket-size blood analyzer that produces results in just 90 seconds. The \$3,000 device relies on microchip biosensors to detect conditions that reveal ailments such as anemia and diabetes. And the analyzer re-

quires just a pinprick rather than a test-tube sample of blood.

A combination of electronics and chemistry does the trick. The first step is to place two drops of blood in a microchip cartridge that is inserted into the hand-held analyzer. Micro-brane-tipped sensors measure electrical potential, conductivity, or resistance in the sample. The readings indicate levels of blood sugar, nitrogen, red blood cells, and common electrolytes such as potassium. More complex analyses, such as testing for HIV, the virus that causes AIDS, still require lab tests.

The \$12 cost of each cartridge far exceeds the pennies-in-test cost of large lab machines. But i-STAT thinks the device will sell to hospitals attracted by the quick, efficient diagnosis.

A DRIVER'S-EYE VIEW OF CAR CRASHES

Most people who've been in an auto accident never forget that moment when time and space effectively blur. To help carmakers understand exactly what happens during collisions, Eastman Kodak Co. has devised a motion-analysis system that can withstand 40-mph crashes.

A rugged, steel-encased electronic camera mounted in a test vehicle sends images in computer-compatible digital format to a remote system that can record up to 12,000 pictures per second. Carmakers can thus watch collisions, then replay them in slow motion. "With this, we can do something instantly that generally took us two days," said James Moon-Dupre, a safety expert at Ford Motor Co. in Dearborn, Mich.

Kodak marketer Gerald Lilly estimates the new system will sell for more than \$60,000. But the system means that carmakers don't have to destroy as many cars in crash tests. Moreover, having this information in digital form lays a groundwork for future test crashes done in the computer-generated world known as virtual reality.

WATCH OUT, SPIDERMAN—LANCE STONE IS ON-LINE

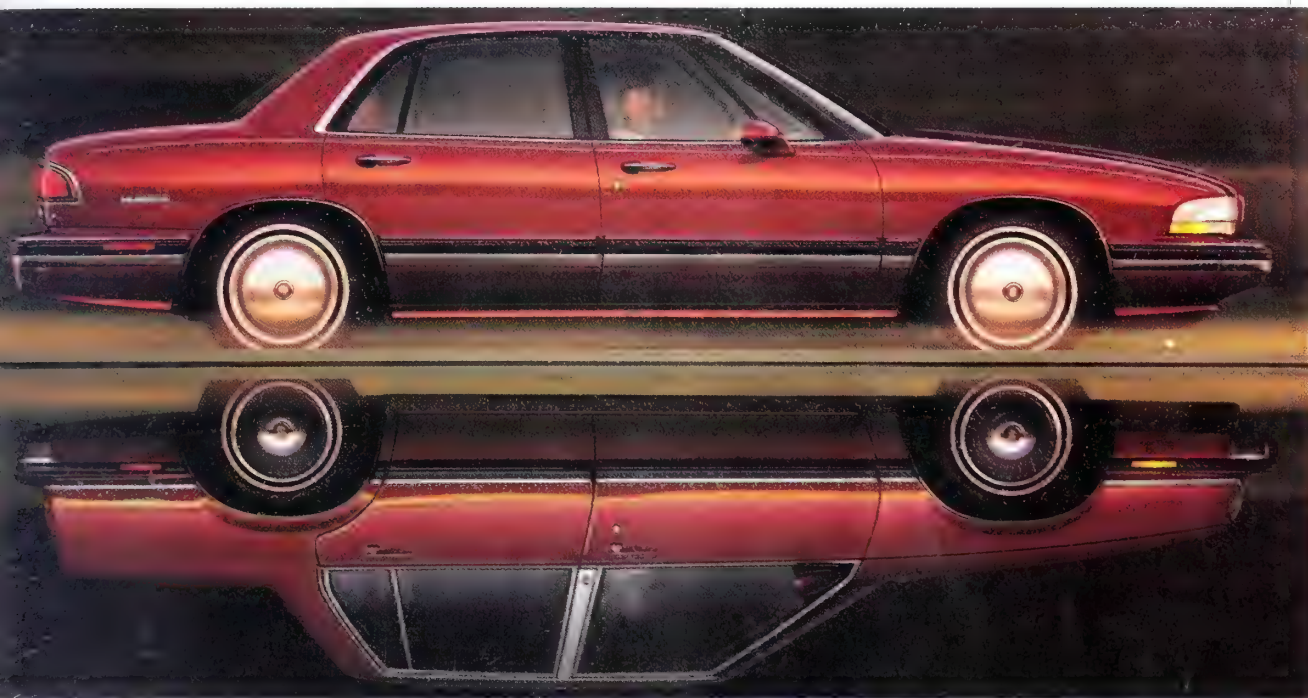
'Whack! Thunk!" The narrative between hero Lance Stone and his assailant is in the best comic-book tradition. But the story of *Lance Stone: Trouble at the Woz* isn't frozen in print. It's an electronic comic book for personal computers.

The drawings are spiced with sounds, occasional animation, and so-called hypertext technology, which makes the comics interactive. At certain points you can switch to a subplot or watch events unfold in the year 2091 from the viewpoint of another character at the Woz, a next-century nightspot. Developed by PC Comix Inc. in Ashland, Ore., the first version of HyperComix for IBM-type PCs with color monitors will cost \$20. Its cliff-hanger ending leaves you itching for more.

PC Comix is a startup co-founded by Paul Mace and Douglas Zeffer. Mace is president of Paul Mace Software Inc. and author of Mace Utilities, a popular set of PC programs. Zeffer helped found GRAFX Group Inc., a computer-art company in San Juan Capistrano, Calif. The two longtime comic-book fans predict HyperComix will be a \$100 million market by 1992.



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FINAL INSPECTION: HP'S REVAMPED WORKSTATION UNIT HAS STARTED WINNING BACK MARKET SHARE

SUDDENLY, HEWLETT-PACKARD IS DOING EVERYTHING RIGHT

It axed a raft of committees. Now, new products fly to market

It was early last December, and time was running out for Hewlett-Packard Co. In barely a month, it was supposed to introduce a hot new workstation. But market researchers said that at \$7,500, the machine was priced \$2,500 too high to compete with models from archrivals Sun Microsystems Inc. and Digital Equipment Corp. Stolid, slow-moving HP was delivering a dud.

Or was it? Within a week, HP engineers had hustled to configure a new workstation, priced at \$4,990—a sly five bucks less than Sun's cheapest. Stolid?

Slow-moving? Try swift and surprising: Fifty-three-year-old HP, for much of the 1980s a victim of corporate calcification, suddenly is one of the hottest, most aggressive computer makers around. By slashing bureaucracy and accelerating product development over the past two years, the Palo Alto (Calif.) company is gaining market share and opening potentially vast new computer markets.

And, at a time when most of the world's largest computer makers are watching profits evaporate and stock prices plunge, HP is delighting investors

with unexpectedly strong turns. Analysts had anticipated only flat earnings for the first quarter, ended Jan. 31. Instead, profits were the best in five years. A new-product explosion, coupled with cost cuts, set earnings soaring 49%, to \$56 million, on a 13% rise in sales to \$3.9 billion. As a result, the stock shot up 14% on Feb. 1 to 73½, tying a record set in 1987. Analysts raised 1992 earnings estimates by 20%, to around \$5 a share. Declares HP Chief Executive John Young: "We can get more than our fair share of business."

SELF-RULE. Even competitors are impressed. "They're the toughest company we go after," says Casey Powell, chairman of minicomputer maker Sequent Computer Systems Inc. "Whatever they're doing, it's working pretty damn well."

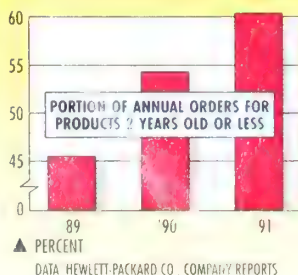
Why is everything clicking now? Young has eliminated nearly 6,400 jobs, or 6% of the HP work force, since 1989, boosting sales per employee 66%. But even more important, in October 1990, he and David Packard, HP's chairman and co-founder, dissolved dozens of committees that had been used to evaluate all decisions. While they spent months politely discussing ideas, market windows slammed shut. Now, the computer division is streamlined: One group sells minis and workstations directly to big customers, the other sells printers and PCs through dealers. They're largely autonomous, with their own sales forces.

The whole company seems speedier. In less than a week last August, it struck a deal to buy a service business from Mentor Graphics Corp. "I was totally amazed they could move that fast," marvels Jack Woida, a Mentor marketing director.

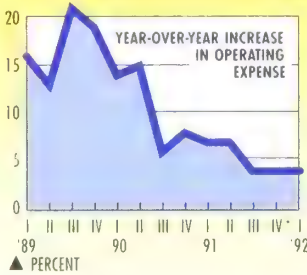
The fast action has extended to product development as well. In the past year, HP has introduced three new workstations, a raft of minicomputers, two groundbreaking printers, a palmtop PC, a new microprocessor chip, and 40 new test and measurement instruments. Some 60% of HP's orders last year were for products less than two years old, compared with 45% in 1989.

The trend is especially dramatic in computers. Last year, HP replaced its entire line with 21 new models. Vice-President Willem P. Roelands says the machines got to market in 10-

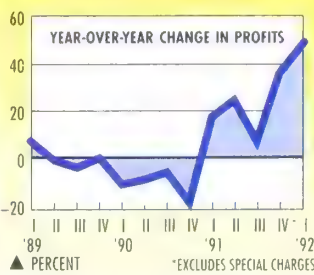
HP: A BOOM IN NEW PRODUCTS...



...AND EFFECTIVE COST CONTROLS...



...HAVE PAID OFF HANDSOMELY



time because he got fast approval to technology from HP's workstations. "Before, it would have taken umpteen committees," he says. The result: While the mini market is growing about 3% annually, HP's mini sales are jumping at 10% annual clip. And sales of its modems with industry-standard Unix software are growing 50%, expanding HP's market share by snagging IBM mainframe and DEC VAX customers.

VITABLE PRINTERS. Even more impressive, HP has held on to 60% of the top laser printer market—despite competition from 75 other suppliers, including Apple Computer Inc. and just about every Japanese computer maker. While \$800-and-up HP Laserjets continue to dominate desktop publishing, less expensive ink-jet printers are grabbing market share from cheap dot-matrix printers. Ink-jet models sell for less than half the price of Laserjets but are more profitable because HP builds more of their parts.

At HP is proudest of its record in workstations, where it is now gaining market share lost after the rocky merger with Apollo Computer Inc. in 1987. A new HP line, introduced 10 months ago as the fastest on the market, now accounts for half of its workstation sales. Even though short supply of a key chip slowed shipments, HP is the only workstation maker besides Sun Microsystems Inc. to increase sales in the fourth quarter. This year, analysts expect it to take share from Sun and HP no longer suffers from what employees call "terminal niceness." Now it's aggressive. An ad boasting about the speed of the \$4,990 workstation challenged: "Can Sun do that? Nope."

Engineers also are helping the company create entirely new markets. The HP palmtop PC, which moved from a niche to market in just 15 months, has added up \$50 million in sales since its unveiling last April. On Feb. 26, HP announced plans to build an interactive television device. Says the vice-president in charge, Robert J. Frankenberg: "Before this might have been killed in a committee before it even got to me." Now, a new company charter calls for building just such "information appliances" as well as standard computer boxes.

MORE EASY FIXES. For all the improvements, Young has plenty to do. He has just 2% of the worldwide PC market and its strategy there remains unclear. More important, with 19% of the billion workstation market, HP is behind Sun, with 29%. And DEC has its speedy Alpha computers, due in late 1992, will blow away HP's vision Architecture design. Says Robert G. Herwick: "HP has to make a

lot of headway in the next 18 months."

The big cost savings are over, too. HP will have to keep revenues growing rapidly to maintain its earnings momentum. With no sign in sight of a strong economic recovery, that will be a challenge. And new markets, such as palmtops, probably won't pay off much this year.

Finally, there's the big question of who will replace Young, 59, when he retires, perhaps as early as next year. One hopeful is Executive Vice-President

Lewis E. Platt, head of minis and workstations. He wins high marks for an aggressive style. But insiders say Executive Vice-President Richard A. Hackborn, head of printers and PCs, has demonstrated more vision. His relentless cost-cutting in manufacturing and distribution has become the model for the new HP. Whoever takes over, it's clear that for the first time in years, HP's CEO will have the wind at his back.

By Robert D. Hof in Palo Alto, Calif.

'INFORMATION APPLIANCES' TURN HP ON

In early 1989, Hewlett-Packard Co. Chief Executive John A. Young asked some managers to look into the future of personal computers. What they saw was a world of portable and specialized devices communicating by wireless networks. These "information appliances" would be easy to use and tailored for particular applications.



THE 95LX: THE PALM-SIZE POWERHOUSE IS A BIG WINNER

But nothing like that was on HP's drawing boards. After an early entry—and retreat—from the laptop PC market, HP was thinking strictly desktop.

Alarmed, Young began pushing HP to cram computers into smaller packages. "These technologies are going to drive the computer industry of the '90s," he says. HP won't stop making its bread-and-butter minicomputers and workstations. Young says they will form the "digital backbone" needed to make handheld computers most useful. But a big chunk of the industry's growth, he believes, will come from the new varieties of computer.

HP is not alone in making information

appliances, but its first foray into the market is a clear winner. Introduced last April, the 95LX is a palm-size PC that runs the popular Lotus 1-2-3 spreadsheet. About \$50 million worth of the \$700 devices have been sold. And 1,200 makers of software and peripherals plan to offer other add-ons. One designed for pilots and surveyors, for instance, lets the 95LX pinpoint its location anywhere in the world.

TV TOY. Young promises a flood of variations. Some possibilities: A 95LX containing the blue book of used-car prices or a local Multiple Listing Service for Realtors—both updatable via radio. A portable version of HP's gas chromatograph could consult a remote data base of known substances to identify industrial gases.

Last month, HP made an even more audacious move away from the computing mainstream: It announced plans to build a wireless, interactive-television device for TV Answer Inc. in Reston, Va. The box allows viewers to play along with game shows, order food, and do their banking on a TV set. HP expects in the first year to sell 1.5 million of the PC-like devices.

To some, a toy for couch potatoes seems like a mighty big stretch for techie HP. "Consumers have never attached an HP peripheral to a

TV set," notes Gary Arlen, a communications consultant in Bethesda, Md. Still, HP has been selling calculators to consumers for years, increasingly through mass merchandisers such as Circuit City Stores Inc. And HP's reputation for quality, argues Carolyn Griffin Osgood, an analyst at market researcher International Data Corp., makes it "just the right company to get into consumer electronics."

Young has no delusions about making HP into an American Sony, however. "We are not going to make an HP Walkman," he promises. But an HP Blue Bookman, perhaps?

By Robert D. Hof in Palo Alto, Calif.

COLGATE: OH WHAT A DIFFERENCE A YEAR CAN MAKE

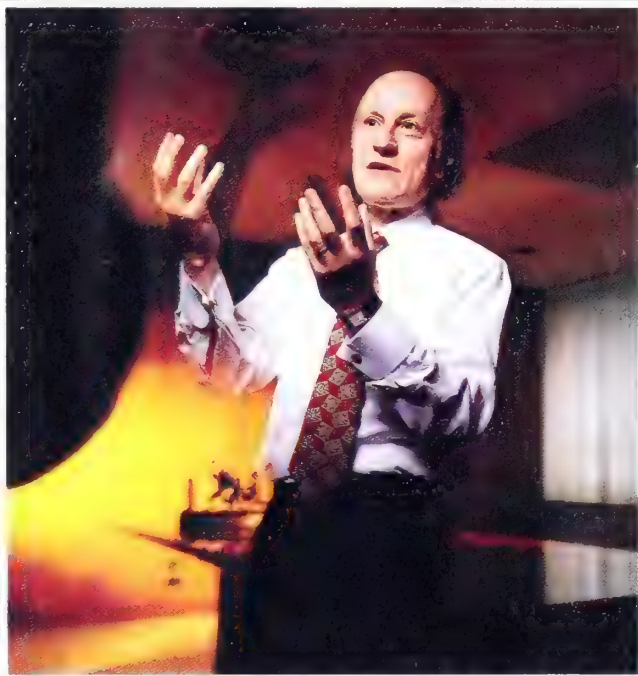
Costs are down, margins are up, and it's about to gobble up Mennen

Reuben Mark has always been an energetic sort, bounding around his office and waving his arms as he speaks. But lately, he has become even more active than usual. To stay trim, the 53-year-old chairman of Colgate-Palmolive Co. has taken up jogging near his suburban Connecticut home. He keeps an exercise bike near his office. He has even been known to drop down and do 50 quick push-ups on his beige office carpet.

Hard as he has been pushing himself, it's nothing compared with the way he has been driving his company. Over the past year, once stodgy Colgate has announced a major restructuring, raised \$446 million in a public equity offering, started manufacturing toothpaste in China, and committed \$900 million for a collection of acquisitions. The biggest: its \$670 million takeover of Mennen Co., announced on Feb. 13. It is all part of Mark's 1990 plan to double net income to \$640 million by 1995.

GLOBE-TROTTER. Before Mark's tenure began eight years ago, that goal would have seemed impossibly distant. Marketing everything from kosher hot dogs to golf equipment, Colgate chronically underperformed. About the only place it excelled was in international markets, where it made a name for itself before there was much competition. But Mark pared operations down to five core businesses and began cutting costs. He recruited former Corning Inc. executive Edward T. Fogarty to be Colgate U.S.'s president, who in turn embarked on a pricing strategy that has more than doubled domestic operating margins over the past three years (chart).

For now, international sales remain Colgate's strong suit. Its wide distribution—in such markets as Australia, Latin



MARK'S CHALLENGE: NEW PRODUCTS ARE NOT COLGATE'S FORTE

America, the Far East, and more recently Eastern Europe—has helped diminish direct competition with heavyweights Procter & Gamble Co. and Unilever. Last year, two-thirds of Colgate's \$6.1 billion in sales and 64% of its profits came from overseas. Colgate toothpaste, No. 1 in the world for decades, has increased its share from less than 30% to 43% under Mark.

But there's no way Colgate can avoid

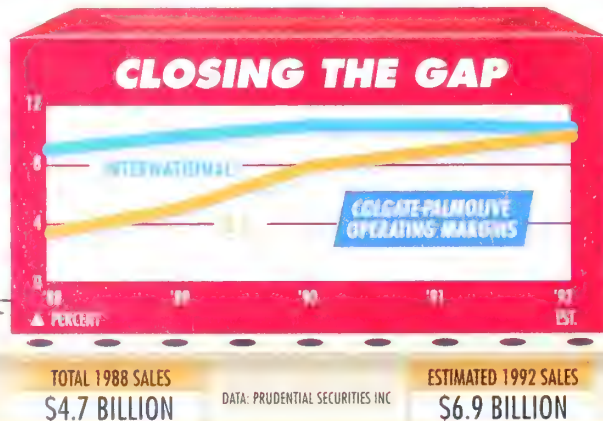
its rivals in the U.S., where toothpaste ranks No. 2 behind P&G's Crest brand. Despite personal-care and household-goods sales of more than \$1 billion in the U.S., profits were squeezed by Colgate's oversized sales force and the costly trade promotions it relied on to boost brands against bigger rivals.

All that began to change in 1989, when Colgate brought in Fogarty. Instead of propping up lagging brands, such as Ajax and Fab detergents, Fogarty cut deeply into the trade promotions given to retailers. Currently, he raised prices on stronger brands, such as toothpaste and dishwashing liquids.

FOLLOW THE LEADERS. As expected, volume and market share in detergents plunged. The combined share of Fab, Ajax, and other brands shrank from around 10.5% to about 6.5%, but operating results in detergents started to climb into the black in 1990. Although Colgate remains badly outweighed by P&G and Unilever, which together control some 80% of the market, its detergent business now is profitable. Since 1988, total U.S. after-tax profits grew 184%, to about \$90 million last year, on net margins of 7%. Says Fogarty: "We far outstripped what anyone thought we could do."

But if Mark is going to double Colgate's earnings by 1995, he will have to do a lot more than trim its aging brands. Some of the responsibility for growth will fall to Lois D. Juliber. The former head of Far East and Canadian operations, Juliber recently became chief technological officer, overseeing research and development of new products.

That's a tough job. The company has had some wins overseas, notably in Latin American markets, with innovative new products for U.S. consumers have not been a Colgate



k. Last fall, the company began its major new-product launch in the five years with superconcentrated versions of Fab and Ajax detergents. Then, Colgate has announced plans to reformulate Palmolive soap, dishwashing liquid for sensitive hands, and a long-soda toothpaste. Colgate promises to back these and existing products with a big U.S. ad splash—estimated at \$10 million this year, up 25% from 1991.

D MINE. Problem is, most of these products are of the me-too variety and probably won't grab big market shares. New detergents, for instance, follow the lead into the market. The baking-soda toothpaste is a response to Arm & Hammer's wildly successful brand, which has grabbed about 8% of the U.S. toothpaste market since 1988. With that customer lineup, says Andrew S. Shore, analyst at Prudential Securities Inc., the company is going to have to live by the law of acquisitions over the next five years to promote growth.

The Mennen deal, set to close in April, is to be an excellent move. Although the \$515 million-a-year company was too small to thrive on its own, Mennen's deodorant products, such as Speed Stick, command a leading share in the \$1.1 billion market. The company's 14.2% operating margins will help boost Colgate's overall domestic margins to about 10%. The fit also is near-perfect in Latin America. Mennen has a good presence in Mexico and Venezuela, while Colgate is strong in Mexico and Brazil. Says David Letzler, president of Colgate's Latin America division: "Mennen is an absolute little gold mine."

Mark would like to dig up a few more gems, so long as they complement Colgate's five core groups—the mouth, body, the house, fabric, and pet food. The sturdy balance sheet will make purchases easier. Last year's equity offered compared debt from 50% to 36% of capital. Since Colgate basically swapped debt for Mennen, the debt level won't be affected. Excluding a \$243 million charge last September, when Mark cut 8% of the work force, Colgate's worldwide operating profits for the year rose to \$622.6 million. That's a gain of 28% from 1990. Wall Street's reaction? Colgate shares have climbed some 28% in the past year, to about 46, compared to a 22% gain for the Standard & Poor's 500-stock index.

Colgate's chief vows to keep trimming costs. "Enough is never enough," Mark says. Given what he has accomplished so far, analysts such as Bonita Austin of Morgan Lehman Brothers Inc. give Colgate a good chance of reaching its earnings goals. By then, the energetic chairman may even be fit enough to run a marathon.

By Bruce Hager in New York

**CEO ABRAMSON:
TOUGH TALK FROM
A TOUGH GUY**



STRATEGIES

IN THIS CORNER, IT'S U.S. HEALTHCARE...

Now, the successful HMO has to fend off the insurance giants

In an industry of quiet and restrained managers, Leonard Abramson is as startling as an icy stethoscope. The combative chief executive of U.S. Healthcare Inc. rankles administrators by claiming hospitals are too costly because of overstaffing. Doctors spooked by litigation, he says, drive up prices by overtreating patients. Worst of all are insurance companies, the "dinosaurs" whose relentless rate hikes are unsettling corporations and employees alike. "They are running a losing race," he says. Theirs is "a dying world."

Abramson's cocky style would be a lot harder to stomach if his company weren't doing so well. His fast-growing health maintenance organization, now operating in such high-cost locales as New York and Pennsylvania, as well as in six other Northeastern states, is thriving by offering a lower-cost alternative to traditional medical care. Over the past three years, membership has surged nearly 50%, to 1.33 million. Profits last year soared 95%, to \$151 million, on a revenue rise of 28%, to \$1.7 billion. This

year, analysts say profits could rise by an additional 20% or more as revenues top \$2 billion, double the 1989 level.

For the short term, U.S. Healthcare will remain hard to beat. But sustaining the momentum of the past few years will be tricky. For one thing, the company, based in Blue Bell, Pa., may become a victim of its own success. In December, New York regulators, concerned that maybe U.S. Healthcare is a little too profitable, denied its bid for a 10.7% rate increase, permitting only a 9% hike in the first quarter for new or renewing companies. "If we feel a company is doing well and they don't need an increase, we will not grant them an increase," says New York State Insurance Dept. spokesman John Calagna.

HITTING BACK. Even more worrisome are new competitive threats. Once lumbering insurance rivals such as CIGNA, Aetna, and Prudential have awakened to the managed care approach, in which patients choose from a pool of doctors in return for lower costs. The insurers are assembling their own networks of physi-

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and hospitals. But they boast of flexibility by allowing employees to use out-of-network doctors as long as they pay more of the cost. "We've formed ourselves," says William H. Key Jr., a senior vice-president at A Employee Benefits Co.

The insurance giants stand a good chance of clobbering national HMOs such as U.S. Healthcare. They have vast numbers of programs, with different deductibles and levels of benefits tailored to each employer. And since U.S. Healthcare operates in only 10 states, it's at a disadvantage in wooing employers with its far-flung facilities. "Companies that are nationwide only want

coverage from companies that are national scope," says Robert D. Eicher, a health plan consultant with A. Foster Smith & Co. of New York.

In New Jersey, Prudential is signing enough employers to nip at Abramson's heels: The Pru added 53,000 man-

aged care members last year to hit 203,000, about half the number U.S. Healthcare serves. "The neat thing is there is competition out there," says Patricia Coyle, benefits manager at Rohm & Haas Co. Her Philadelphia company, now a U.S. Healthcare client, is thinking about adding managed care programs

from others.

But U.S. Healthcare isn't checking into the intensive care ward just yet. It is responding with more flexible programs, such as a "versatile HMO" that lets employees use out-of-network medical services with written permission from their primary U.S. Healthcare doctors. Similar to the insurers' plans, patients pay annual deductibles of \$500 per family and foot 25% of the bill for these extra services, compared with out-of-pocket costs of \$2 per visit to primary-care doctors within the network. Such programs help draw skeptical employees into managed care networks, according to an upcoming re-

port from InterStudy, a Minnesota health policy group.

As might be expected with an aggressive boss like Abramson at the controls, U.S. Healthcare is a tough competitor—sometimes maybe too tough. To slam Prudential Insurance Co. of America, U.S. Healthcare executives recently circulated a letter from the insurer telling a corporate client of an 87% rate hike. What U.S. Healthcare didn't say was that it had already refused to bid on serving the client, citing insufficient financial data. Also, the client worked out a better deal with the Pru in the end.

Wall Street evidently isn't too worried about U.S. Healthcare's future. Its shares rocketed from 21 in September to around 56 earlier this year, then slipped a bit with the rest of the market in March (chart). The main reason for investor enthusiasm seems to be that U.S. Healthcare still has lots of growing room. It serves only 1.8% of New York metropolitan-area residents, for instance. But then, its competitors are going to be chasing those same customers. If Abramson isn't careful, the insurance "dinosaurs" may yet make the ground around him tremble.

By Joseph Weber in Blue Bell, Pa.



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IT'S A BUYER'S MARKET IN SECOND HOMES, TOO

Low prices and attractive mortgage rates are not only spurring buyers of primary residences. Real estate agents in some key resort areas indicate that many people who already own a home think the time is right to look into buying a weekend place or vacation hideaway.

With upbeat sales reports from such places as New Smyrna Beach, near Orlando; the ski areas of Summit County, Colo.; and New York's Hamptons' shore communities, you might consider checking out the market if you have dreams of a beach house, retirement condo, or wooded cabin. Recently, mortgage rates have been edging upward. And while asking prices in some areas are still declining, they're beginning to level off in others.

There are even signs of rising prices in some markets. A steady influx of newcomers to Reno/Lake Tahoe and to Tucson, for example, caused homes to appreciate throughout the recession. And across the nation, says the National Association of Realtors, the median price of a previously owned home rose 2% in January from December—and 6.3% from January, 1991.

COMPLEX JOB. If you're interested in property close to a ski area, there's another reason to move quickly: Prices are lowest at the end of the season, when renters head for home and owners face the prospect of having their condos sit empty until the next winter. And in nearly any vacation-home area, you are likely to get a better deal if you make an offer ahead of the crowd of springtime shoppers looking for a summer retreat.

In Traverse City, Mich.,



where prized lakefront property goes for \$1,000 to \$100 a foot and lots are a minimum of 100 feet across, "people have been piling in since the first of the year," says Bussa, general manager of Real Estate One office. "That's despite the constraints of the tax-law revisions."

Changes in the Internal Revenue Code in 1986 and 1990 reduced the value of a second home as a tax shelter. If you rent the place out occasionally, it's a complex job to keep records and compute the taxation on the rental income (box). But if you own two homes, you can deduct interest on the mortgages on both (as long as the two mortgages don't add up to more than \$1 million). Property taxes are also deductible. So are some expenses when the house is rented out.

BROAD SELECTION. The regulations even include a break for people who plan to sell a present home that has substantially appreciated and retire to a different one. Most people usually count on making the sale and using all or part of the proceeds to purchase the retirement dwelling. If they put the money into another home within two years, they can postpone paying taxes on the gain from the first until a future year. But it's possible to hold off taxes on the gain even if you purchase the second home to use as a vacation place before you sell the first.

The trick is to offset all or some of the gain with expenditures that go to expanding or reconstructing the vacation home to get it ready for full-time living. You simply have to incur the costs within a period that starts two years before you sell your main home.

THREE GETAWAYS ON THE MARKET NOW



\$12,000 COLORADO CHALET: THE END OF SKI SEASON IS THE TIME TO BUY



\$350,000 ARIZONA HACIENDA: PRICES THERE ARE STARTING TO RISE



\$975,000 LONG ISLAND RETREAT: SUMMER RENT CAN PAY THE MORTGAGE

until two years after. In *The Homeowner's Guide* (Runzheimer International \$14.95), tax attorney Julian Block notes this requirement: The money must be for major reconstruction or improvements, such as a new room, heating system, or new kitchen. Along with that, says Block, you may want to have a swimming pool or tennis court put in or the grounds landscaped. If you have such recre-

ational or aesthetic projects done by themselves, the Internal Revenue Service may not count the expenditure as part of the retirement home's purchase cost.

Even in areas hit hard by the recession, there are other reasons to take advantage of this buyers' market besides low prices and low-interest mortgages. Dick Elsea of Detroit's Real Estate One says, "You now have 20, 30, or 40 houses to choose from at the

price you want to pay—not just one or two." But watch out: A large number of homes on the market is fine for people anxious to buy, unless they're thinking to sell their new acquisitions at a big profit as soon as the economy turns up. In some areas, it could take a long time before enough buyers show up to absorb the supply and make prices escalate sharply.

To purchase a weekend place before prices climb,

some homeowners have discussed refinancing their present mortgages, says Gene Gallagher, a principal in an ERA Realty office in Bethesda, Md. The money saved each month would go to meet second-home payments.

SEA VIEW. Things can be even easier for people who own second homes they can rent out during part of the year, says Dennis Lazicki, manager of a Coldwell Banker office in Amagansett, N. Y. "Here on Long Island," he points out, "anything within sight of the ocean rents for \$15,000 to \$20,000 for the summer. It can take care of your mortgage for the year."

Getting such rental income has relieved some of the pain one couple from that area felt over the past few years. When they retired to a new home in Santa Barbara, Calif., in 1989, Peter and Christel Hann put their three-bedroom summer place on Fire Island, N. Y., on the market for \$385,000. It's still unsold, although they cut the price several times to its current \$295,000. "Now, we've lost the chance to defer taxes on a gain, so it doesn't make sense to go a penny lower," says Hann. "And with all the predictions of an economic upturn, we're thinking about moving the price up a notch." If other would-be sellers do the same, it might cost you to think twice about a second-home purchase. *Don Dunn*

vacation home can provide both extra income and tax breaks if you rent it out on occasion. But the IRS requires you to keep track of how many days it's rented vs. how many days you use it personally. If you collect rent for less than 15 days a year, the income is tax-free. Regardless of the amount, the money must not be declared. And you can't deduct all mortgage interest and property taxes on the house, the same as on a primary residence. Things are more complicated if you rent out the home for a longer time. If you

TURNING YOUR GETAWAY HOME INTO A TAX SHELTER

don't occupy it yourself for more than 14 days (or 10% of the number of days it's rented), you can classify it as rental property. That means you declare the rental in-

You can even write off the cost of travel to check out the place

come. But along with mortgage interest and taxes, you can also take deductions for utilities, insurance, cleaning, repairs and improvements, and even travel expenses to check out the place. What's more, you can claim depreciation, deducting a portion of the home's cost each year.

COUNTING DAYS. One tricky point: You can't deduct mortgage interest that gets allocated to the days you use the

house yourself. On those days, it's considered personal interest, which is no longer deductible. The same rule applies to what you spend for utilities and such; fractional amounts allocated to the days you use the house are personal expenditures.

What if you use the house more than 14 days, or exceed the 10% limit? Then, the sum allocated to the days you occupy the place can be written off only against rental income. So if you don't charge enough or can't find enough renters in a year, you may show a loss—but you can't deduct it. *D. D.*

Software

PC HELP IN TAMING YOUR 1040

Recent tax-law changes have made it difficult to deduct the cost of having a professional prepare your income-tax return. That's one reason why more taxpayers may decide to break with the past this year and spend a couple of hours feeding their financial data into a personal computer. Since actual prices for tax-preparation programs are about half of list, you can beat an accountant's fee—and maybe even find a few bucks in overlooked deductions.

More than a dozen tax packages are out there, but only five merit serious consideration by owners of IBM-type PCs (table). For first-timers with a typical corporate manager's return, there's no need to look beyond TaxCut from Meca Software—unless you live in a state not included



RATING TAX-PREPARATION PROGRAMS

	TaxCut	TurboTax	EasyTax	J.K. Lasser	Personal Tax Edge
ON-LINE ADVICE	A +	A	C	B	A
EASE OF USE	A +	A +	A	B	A
ACCURACY	A	A	B	B	B
COMPREHENSIVENESS	A +	A	A	A	C
AUDIT OF RETURN	A	A +	B	C	B
TAX PLANNING	B	A	C	C	NA*
IMPROVEMENT OVER 1991	B	A	A +	B	A
STATE RETURNS	13	44	24	24	41
LIST PRICE	\$90	\$80	\$80	\$75	\$49

*Not applicable

DATA BW

among its optional \$40 state tax-prep programs and you don't want to do the state return by hand. In that case, ChipSoft's TurboTax is for you. TurboTax has programs for all 44 states that levy an income tax. Both TaxCut and TurboTax also come in Windows-compatible versions. For Macintosh fans, the one to get is ChipSoft's MacInTax, which lists for \$100.

When TaxCut was introduced four years ago under the name Ask Dan About Your Taxes, it set a new standard in tax software, turning jargon into simple English and offering tax-saving tips in a deft manner that makes preparing your returns almost enjoyable. Ever since, the best has only gotten better. But TurboTax, the long-time market king, has nar-

rowed the gap dramatically, and this year, EasyTax (formerly Swiftax) by TimeWare has emerged as a strong No. 3 challenger. Parsec Technology continues to hold down a solid spot among nypinchers with its budget-priced Personal Tax Edge.

PENALTY PROTECTION. If your tax return is fairly complicated, you would be better off sticking with TurboTax or TaxCut. Their accuracy is unmatched, and Meca even guarantees to reimburse you if the Internal Revenue Service penalizes you for a miscalculation.

Although all five programs will perform flawlessly for most people, Laura Meadows, a New York tax attorney who reviews tax software for *PC Magazine*, discovered that certain situations will overtax several programs. For example, TaxCut and TurboTax incorrectly handle a real estate partnership with both a passive investment loss and a passive rental profit. TaxCut the do-it-yourself plug with either of the top two, you can count on many happy returns.

Otis

Thanks to low interest rates and a growing perception that the worst of the real estate loan crisis is over, bank stocks are fairly pricey these days. So it's hardly surprising that some investors have begun prospecting for value in the little-known and thinly traded world of small-cap bank stocks.

Banks that fall into this category have assets of roughly \$4 billion or less. Better-known regionals start at about \$20 billion. Small-cap banks are generally ignored by Wall Street analysts because institutional investors can not acquire enough shares. So what little research exists is usually done by smaller regional brokerages.

The dearth of information on these stocks makes them somewhat risky. But a lot of hid-

Smart Money

MAJOR BARGAINS IN MODEST BANKS

den bargains are lurking among little banks. And don't forget possible takeover plays as the industry continues to consolidate.

What's more, many small banks have solid local franchises. And by concentrating

on their own communities, many avoided far-flung and reckless real estate lending.

Mid Am is a favorite of analyst Henry Dickson of Chicago-based Kemper Securities Group. Headquartered in Bowling Green, Ohio, Mid

Am, with \$1.2 billion in assets, is the biggest independent bank in northwest Ohio. After earning 92¢ a share in 1991, Dickson expects profits to more than double this year, to \$2.10 a share. Moreover, Mid Am is selling at 9.6 times 1992 profit estimates. The 150-bank index of Keefe, Bruyette

& Woods has a price-earnings ratio of just over 11.

Somewhat pricier, but no less promising, is Valley Bancorporation in Appleton, Wis. Valley, with \$3.8 billion in assets, has an extensive branch network. Its price-earnings ratio is currently 10.3. But Dickson expects earnings to grow by 20% this year, to \$3 a share. He also sees Valley as a potential takeover target.

Another possible merger play is Cullen/Frost Banks in San Antonio, according to analyst Mark Lynch of Bear Stearns. After ailing First City Bancorporation of Texas is acquired this year, Cullen/Frost will be the only independent bank of any size in the state. With assets of \$3.3 billion, that's not saying a lot. But to investors, the value of a small bank isn't size, it's ultimate share price.

John Meelin

SMALL BANKS THAT ANALYSTS ARE HIGH ON

Bank	Share price Mar. 9, 1992	Price-earnings ratio*
MID AM	20 1/4	9.6
ZIONS BANCORP.	47 3/8	9.0
VALLEY BANCORP.	30 3/4	10.3
KBW BANK INDEX	—	11.1

*Based on projected 1992 earnings

DATA: KEMPER SECURITIES GROUP INC., KEEFE, BRUYETTE & WOODS INC.

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Travel

CHECKING OUT LONDON'S NEW GRAND HOTELS

London has never had a shortage of fancy hotels. Such favorites as the Savoy, Claridge's, and the Ritz have long offered top-notch service. Now, three new luxury hotels and one refurbished old-timer aim to distinguish themselves by providing modern plumbing and communications, along with Old World charm.

The priciest, at \$390 for a single to \$5,140 for a suite, is the Lanesborough, which opened in January. The building is a 160-year-old former hospital that has been converted into a 95-room hotel at a cost of \$175 million. Caroline Hunt of the Texas Hunts and her Rosewood hotel company have tried to create the atmosphere of an English country house, circa 1820.

The Regency-style decor veers toward a theme-park view of Olde England at



THE LANGHAM: THE 400-ROOM VICTORIAN HOTEL NOW SERVES AS HILTON'S LONDON FLAGSHIP

The bedrooms are large, but not huge, given the price. Beds are adorned with crown-like canopies. Reproductions of antique cabinets hide such modern amenities as fax machines, VCRs, and stereos.

FAX EASE. The Lanesborough's big selling point: service. Each floor has butlers on call 24 hours for drawing baths, ordering theater tickets, and such. The location is great, near the best shopping

chines have numbers that change with each guest for security. Bathrooms boast sumptuous marble. The \$720 window-laden Conservatory Suites are a relative bargain, perfect for small meetings.

As a small hotel, the Halkin promises a personal touch. Its main problem is a lack of public rooms. There's no health club or bar, although drinks are served in the front hall. The Northern Italian restaurant offers a good but pricey menu.

A much larger hotel is the year-old Langham Hilton. Originally opened in 1865, the Langham was one of London's grand hotels until it closed in the 1940s. Completely renovated, this 400-room Victorian edifice is now Hilton's London flagship.

57 VODKAS. The Langham is more a top business hotel than a true luxury hotel, and the prices are about 20% lower than at the others. The differences are most evident in the bedrooms. Although equipped with the usual amenities, the decor is bland. You would expect more from a \$360-a-night room.

The public rooms are the main attraction. Each is based on a quirky theme, such as Tsar's, a cozy Russian bar that serves caviar and 57 varieties of vodka. The eclectic food in the main dining room, Memories of the Empire, has

improved under a new chef.

One old London favorite worth a new look is the Inchester, where doubles start at \$440. This art-deco jewel had been looking flawed before it was closed in 1989. A \$175 million renovation is the process, the bedrooms were gutted and rebuilt, adding much-needed conditioning and soundproofing. Room decor is tasteful with floral and animal prints.

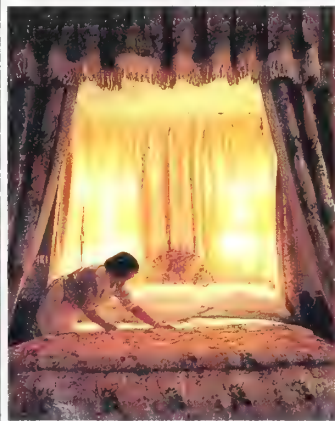
Downstairs, the elegant public rooms sparkle and diners have a choice of the good restaurants, among them the superb Oriental, Chinese food. A new health spa adds to the overall appeal. Best bets: the Dorchester, glitz, the Halkin for a touch of class.

Mark Maremont

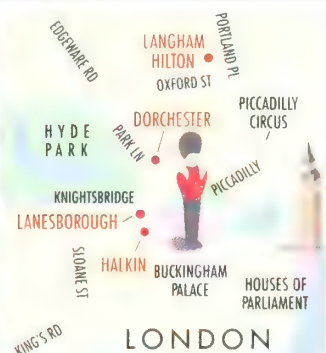
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FOR GLITZ, THE DORCHESTER



times. In the coldly formal Withdrawing Room, walls are hung with oil paintings that look old but were newly done for the hotel. Many books in the library bar are fakes. Still, the bar is well-stocked, and a piano tinkles away in the evening. Diners have a choice of an overpriced formal restaurant (\$100 a head) or the light and pleasant Conservatory.

and across from Hyde Park.

The nearby Halkin, which opened in April, 1991, is a 41-room gem, done in contemporary Italian style. Even the uniforms were designed by Giorgio Armani. Upstairs, the corridors are curved in a gentle arc and the walls are covered with a ribbed black finish. Bedroom phones have two lines, and in-room fax ma-

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gives the starting page for a story or feature. A significant reference to a company. Most companies are indexed under their own names. Companies listed only in tables are not included.

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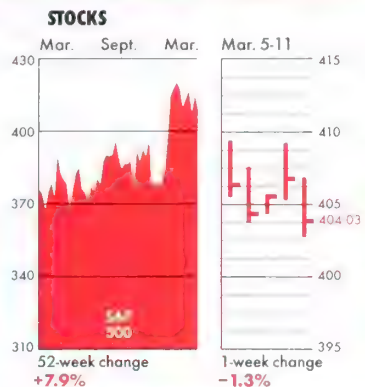
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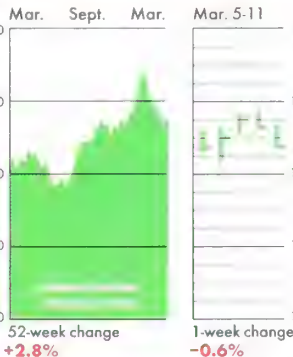
Investment Figures of the Week

STOCKS

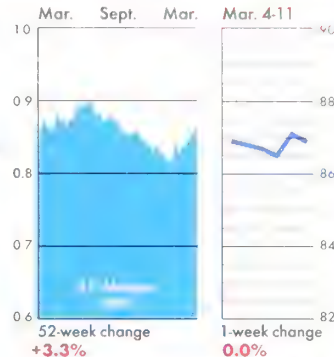
gave up most of the gains and achieved so far this year, investors remained uneasy about interest rates. The Dow Industrial average rose 16 on Mar. 10 after four days of declines. But the all 22 points the following after President Bush said that more concerned with stimulating the economy than pushing down. In the weekly auction, 9, rates of three- and six-Treasury bills rose to their levels since mid-ber.



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS	Latest	% change Week	% change 52-week
DOW JONES INDUSTRIALS	3208.6	-1.8	8.6
COMPANIES (Russell 1000)	214.9	-1.3	10.2
COMPANIES (Russell 2000)	206.9	-2.1	24.6
COMPANIES (Russell 3000)	229.9	-1.4	11.0

FIN STOCKS	Latest	% change Week	% change 52-week
DOW JONES FINANCIAL TIMES 100	2522.4	-1.4	3.0
NIKKEI INDEX	20,592.1	-2.4	-22.1
TSE COMPOSITE	3503.6	-2.3	-1.3

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	4.10%	4.13%	6.0%
30-YEAR TREASURY BOND YIELD	7.96%	7.91%	8.2%
S&P 500 DIVIDEND YIELD	3.00%	2.96%	3.3%
S&P 500 PRICE/EARNINGS RATIO	25.2	25.5	17.4

TECHNICAL INDICATORS

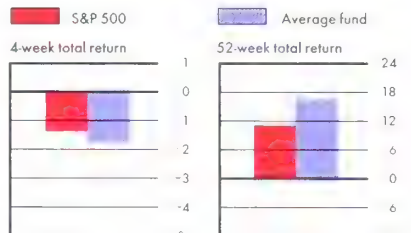
	Latest	Week ago	Reading
S&P 500 26-week moving average	397.4	396.7	Positive
Stocks above 26-week moving average	66.7%	70.2%	Neutral
Speculative sentiment: Put/call ratio	0.41	0.34	Positive
Insider sentiment: Vickers sell/buy ratio	1.62	1.51	Positive

INDUSTRY GROUPS

WEEK LEADERS	% change 4-week	% change 52-week	Strongest stock in group	% change 4-week	% change 52-week	Price
AGGREGATION	19.9	50.5	HEWLETT-PACKARD	21.9	56.8	76 5/8
TRANSPORTATION SERVICES	10.4	28.0	FEDERAL EXPRESS	17.5	28.4	52
MACHINE TOOLS	10.1	20.8	CINCINNATI MILACRON	14.5	13.6	16 3/4
POWER AND TOOLS	9.4	38.1	BLACK & DECKER	13.7	75.4	25 7/8
PACKING	6.9	32.5	CONSOLIDATED FREIGHTWAYS	21.0	9.1	18
WEEK LAGGARDS	% change 4-week	% change 52-week	Weakest stock in group	% change 4-week	% change 52-week	Price
MANAGEMENT	-11.6	-16.7	PITTSBURGH	-14.6	-15.8	15 3/8
ENGINEERING AND CONSTRUCTION	-9.7	-34.0	HUMANA	-11.7	-23.4	24 1/2
SPECIALTY APPAREL RETAILERS	-9.1	-17.3	MORRISON KNUDSEN	-11.3	-18.3	47
PESTICIDE OIL	-7.6	32.0	GAP	-11.3	82.3	45 1/8
	-6.7	-25.2	ORLYX ENERGY	-16.1	-48.9	20 1/8

MUTUAL FUNDS

WEEK LEADERS	% 4-week total return	% 52-week total return
ARMAN DEAN	6.5	13.0
LATIN AMERICA GROWTH	6.0	-12.6
QUALITY SELECT AUTOMOTIVE	5.1	-11.7
WEEK LAGGARDS	% 4-week total return	% 52-week total return
AMERICAN HERITAGE	61.4	-30.1
QUALITY SELECT REGIONAL BANKS	55.4	-29.6
EDMUND REGIONAL BANK B	53.6	-26.6



RELATIVE PORTFOLIOS

Amounts sent the present of \$10,000 one year ago	Treasury bonds	U. S. stocks	Money market fund	Foreign stocks	Gold
Stages indicate pay total returns	\$11,339 +0.24%	\$11,253 -1.44%	\$10,468 +0.07%	\$9,791 -2.49%	\$8,692 -0.56%

on this page are as of market close Wednesday, Mar. 11, 1992, unless otherwise indicated. Groups include S&P 500 companies only; performance and share prices are as of market close

Mar. 10. Mutual fund returns are as of Mar. 6. Relative portfolios are valued as of Mar. 10. A more detailed explanation of this page is available on request.

NIXON IS RIGHT ON TARGET

Think what you may of Richard Nixon, the fallen President has it right about U.S. aid to the former Soviet republics. Nixon says the Bush Administration has offered "pathetically inadequate" support for Moscow's historic but painful metamorphosis. In terms of U.S. national interest, the replacement of the Soviet empire by fledgling democracies and a market economy is the best news since the end of World War II. Bush's response? Some farm credits and a few Air Force planeloads of G.I. rations.

Substantial help is needed. The first order of business should be stabilizing the ruble (BW—Dec. 16). To do that, Boris Yeltsin has to stop printing money. Once the presses have stopped rolling, the West can establish the \$5 billion to \$6 billion ruble-stabilization fund that he wants. Washington's share of this fund could come to about \$1 billion, less than what the U.S. will spend this year on nuclear-weapons research. A similar fund worth \$1 billion helped when Poland underwent economic shock therapy in 1990. The Polish zloty strengthened and became convertible without a cent being withdrawn from the fund.

Treasury Secretary Nicholas F. Brady rightly insists that monetary restraint by Moscow is a precondition for such a fund. Coupled with a true monetary policy and budgetary discipline, the fund could quickly prop up the ruble's value. On Jan. 2, Yeltsin embarked on a radical program: Prices have been freed, and state properties have been sold. There are big risks, but the stores have more goods, and the ruble has shown signs of firming.

The West could help in other ways. Recognizing the strategic importance of an Unevil Empire, Bush could put together a multinational effort to deal with aid. That way, he could tap the resources of the Saudis and the Japanese—not to mention the Germans, who have so far helped the former Soviet states the most. The initiative could help with the ruble fund, ease Russia's trade imbalance, facilitate rescheduling its \$84 billion foreign debt, and provide training.

Foreign policy is supposed to be George Bush's strong suit. He should be taking charge like a statesman, seizing this rare moment in history. Instead, he is allowing a small-bore isolationist like Pat Buchanan to set his agenda. The Democratic contenders, too, need to address the issue. All of them would do well to listen to Richard Nixon.

ATTACKING A LAW FIRM WITH A PICKAX

One of the glories of common law is the presumption of innocence. Even so, U.S. courts have long permitted the seizure of assets before trial to make sure any damages can ultimately be paid. In 1970, the federal racketeering act expanded the government's power to freeze the assets of businesses if it can convince a federal

judge that the assets won't be around when it comes time to collect. The 1989 savings-and-loan bailout law gave thrift regulators this extraordinary power.

It was bound to be misused. When the Office of Thrift Supervision on Mar. 2 barred partners in the New York law firm of Kaye, Scholer, Fierman, Hays & Handler from spending some of their personal and firm assets without the regulators' consent, it acted as both prosecutor and judge. Faced with mounting concerns from bankers and clients about its survival, the firm quickly settled for \$41 million.

The OTS freeze was overkill. Kaye Scholer insists it was nothing improper. The OTS and the Justice Dept. had accused the firm and three partners of misleading regulators about the finances of now-defunct Lincoln Savings & Loan Assn. It claimed damages of \$275 million.

Attacking a law firm with a pickax threatens to shake the precarious balance between attorneys' duties to their clients and their obligations to the public. The government certainly had enough evidence to build a case that Kaye Scholer crossed the line from advocate to accomplice by failing to disclose Lincoln's problems. That does not justify freezing their assets. In the event of a finding of liability, this 75-year-old firm would have paid the damages. Given the weapon's potential for putting a partnership or corporation out of business, the government shouldn't be using firepower that isn't justified.

COOL DOWN TRADE FRICTION WITH CANADA

Trade relations between the U.S. and Canada have reached an acrimonious pitch just three years after their border opened to free trade. Ottawa accuses Washington of "harassment" and "hypocrisy" as a result of U.S. moves to slap stiff duties on Canadian imports, from autos to lumber to magnesium.

It's easy to understand Canada's reaction. A big part of the problem is the high-handedness of U.S. unilateral action on trade issues when the rights and wrongs are far from clear-cut. Low-key negotiation and accommodation would better serve the interests of both countries. In the case of autos, for example, the Customs Service has ruled that cars imported from Honda Canada's Ontario plant do not meet the 50% North American content requirements for duty-free entry into the U.S. under the trade pact. But this is surely an issue to be worked out in discussions with Ottawa, not by U.S. ukase, since the trade pact does not spell out how North American content should be measured.

In the lumber and magnesium disputes, the U.S. argues that exports of these products are indirectly subsidized by policies such as British Columbia's ban on log exports and Quebec's cheap electricity rates. These are legitimate concerns, but the issues are deeply enmeshed in Canadian provincial economic-development policies. Here, too, negotiation seems a surer way to a satisfactory solution than confrontation. If the U.S. can't ease trade frictions with Canada, it may be hard-pressed to convince skeptics that an even broader free trade pact including Mexico is feasible.

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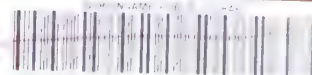
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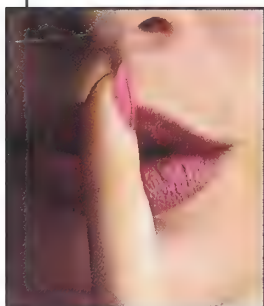


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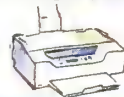
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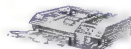
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Notebooks



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THE \$75 MILLION MAN: THANKS TO A PLUMP STOCK OPTION, HEINZ CEO O'REILLY LEADS THE 1991 COMPENSATION DERBY—SO FAR

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The CEO of a typical large American company made \$2 million last year—a prize that has tripled in just 10 years. But the pay pendulum is about to get pushed in the other direction—by irate shareholders, the SEC, or even Capitol Hill. What are companies to do? Reform has to start somewhere, and the best place is clearly in the boardroom

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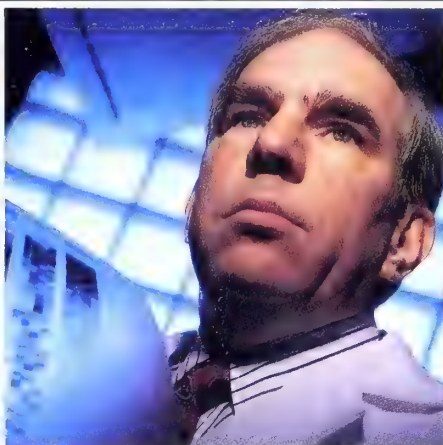
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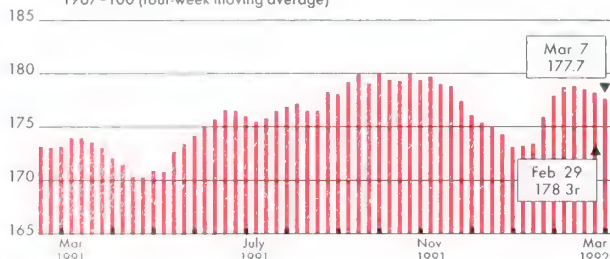
Stopping runaway CEO pay
So far, so good at the Fed
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BusinessWeek Index

PRODUCTION

Change from last week: -0.3%
Change from last year: 2.1%

1967=100 (four-week moving average)

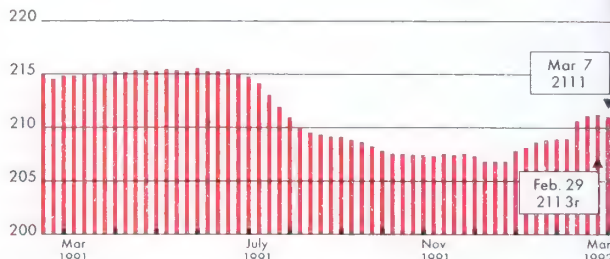


The production index posted the third consecutive decline in the week ended Mar. 7. After seasonal adjustment, output of steel, trucks, electric power, coal, and paperboard fell, as did rail-freight traffic. Production of paper and lumber rose, and crude-oil refining was up. Auto output was unchanged. Before calculation of the four-week trailing average, the weekly index fell to 176.6, from a revised 177.5 in the week before.

BW production index copyright 1992 by McGraw-Hill Inc

LEADING

Change from last week: -0.1%
Change from last year: -1.8%



The leading index dipped slightly in the week ended Mar. 7. All of the available indicators contributed to the decline. Stock prices fell, while bond yields rose. Materials prices dropped at a faster pace, as did the growth rate of real estate loans. The M2 money supply grew more slowly, and business failures rose. Before calculation of the four-week trailing average, the index fell to 210.2, from 210.5 in the previous week.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (3/14) thous. of net tons	1,782	1,787#	5.4
AUTOS (3/14) units	111,741	118,534r	7.7
TRUCKS (3/14) units	83,288	74,685r	116.0
ELECTRIC POWER (3/14) millions of kilowatt-hours	54,163	52,461#	0.6
CRUDE-OIL REFINING (3/14) thous. of bbl./day	12,714	12,267#	-1.6
COAL (3/7) thous. of net tons	18,592#	19,136	-8.0
PAPERBOARD (3/7) thous. of tons	817.0#	828.8r	7.8
PAPER (3/7) thous. of tons	776.0#	758.0r	2.1
LUMBER (3/7) millions of ft.	520.4#	519.2	6.8
RAIL FREIGHT (3/7) billions of ton-miles	20.7#	21.0	6.2

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA¹, SFPA², Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (3/18)	132	134	137
GERMAN MARK (3/18)	1.65	1.67	1.63
BRITISH POUND (3/18)	1.73	1.72	1.80
FRENCH FRANC (3/18)	5.61	5.67	5.56
CANADIAN DOLLAR (3/18)	1.19	1.19	1.16
SWISS FRANC (3/18)	1.50	1.51	1.40
MEXICAN PESO (3/18)	3,047	3,046	2,977

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (3/18) \$/troy oz.	340.300	349.000	-8.5
STEEL SCRAP (3/17) #1 heavy, \$/ton	89.50	90.00	-12.3
FOODSTUFFS (3/16) index, 1967=100	201.2	205.5	-4.8
COPPER (3/14) c/lb.	106.1	106.9	-7.1
ALUMINUM (3/14) c/lb.	59.5	60.3	-15.0
WHEAT (3/14) #2 hard, \$/bu.	4.26	4.23	44.4
COTTON (3/14) strict low middling 1-1/16 in., c/lb	50.50	51.42	-35.8

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment.
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (3/13) S&P 500	405.17	409.12	8.6
CORPORATE BOND YIELD, Aaa (3/13)	8.34%	8.32%	-6.4
INDUSTRIAL MATERIALS PRICES (3/13)	95.7	95.8	0.1
BUSINESS FAILURES (3/6)	480	455r	8.6
REAL ESTATE LOANS (3/4) billions	\$400.9	\$402.1r	-2.5
MONEY SUPPLY, M2 (3/2) billions	\$3,450.2	\$3,463.3r	2.4
INITIAL CLAIMS, UNEMPLOYMENT (2/29) thous	459	437	-3.2

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCIR seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
INDUSTRIAL PRODUCTION (Feb.) total index	107.2	106.6r	1.4
CAPACITY UTILIZATION (Feb.)	78.2%	77.9%	-1.1
CONSUMER PRICE INDEX (Feb.)	138.6	138.1	2.8
PRODUCER PRICE INDEX (Feb.) finished goods	122.0	121.7	0.3

Sources: Federal Reserve Board, BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (3/2)	\$935.7	\$934.2r	11.7
BANKS' BUSINESS LOANS (3/4)	290.7	288.9	-10.5
FREE RESERVES (3/4)	862r	1,105r	2.0
NONFINANCIAL COMMERCIAL PAPER (3/4)	138.8	135.7	-4.3

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for a two-week period in millions).

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (3/17)	4.14%	3.87%	6.10%
PRIME (3/18)	6.50	6.50	9.00
COMMERCIAL PAPER 3-MONTH (3/17)	4.38	4.26	6.31
CERTIFICATES OF DEPOSIT 3-MONTH (3/18)	4.27	4.22	6.35
EURODOLLAR 3-MONTH (3/14)	4.28	4.20	6.33

Sources: Federal Reserve Board, First Boston



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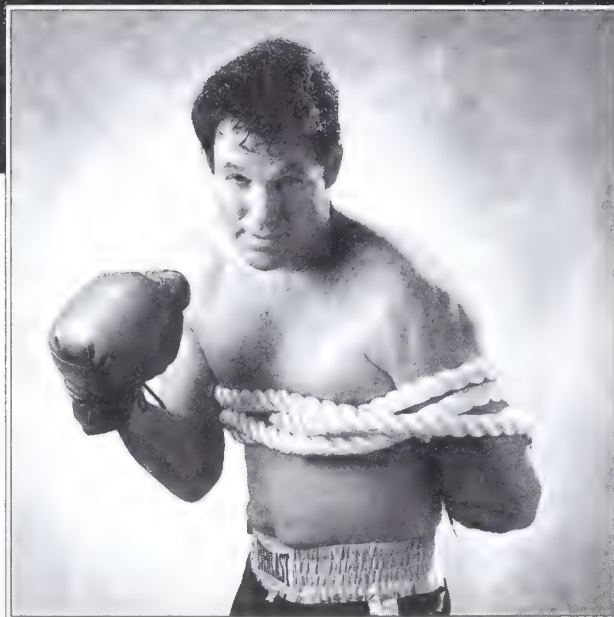
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PUBLISHER'S MEMO

TO OUR SUBSCRIBERS

Late last autumn, a number of you reported you had received harassing telephone calls or questionable invoices about your BUSINESS WEEK subscription. Because of details you provided, BUSINESS WEEK has been able to file a lawsuit in U.S. District Court in Seattle to block an alleged subscription-renewal scam.

The organizations involved are Northwest Subscription Service, Profile Subscription Service, and Pinnacle Subscription Services. Our suit charges that these agencies and their owners misrepresented themselves to obtain a confidential subscriber list. They then solicited and collected money for renewals of BUSINESS WEEK.

The activity affected BUSINESS WEEK subscribers in selected Zip codes around Puget Sound and also in California, Colorado, Georgia, Montana, North Carolina, South Carolina, and Texas.

Fortunately, we were able to move quickly. A temporary restraining order has been issued by the federal court in Seattle to bar the defendants from falsely representing that they have authority to act on behalf of BUSINESS WEEK.

Unfortunately, unauthorized use of subscriber lists is an industrywide problem, which hurts not only subscribers and magazines but also legitimate magazine-subscription services that have built up long-standing reputations for good service.

If you feel you may have been deceived in the alleged scam, please send a copy of your canceled check or credit-card receipt, plus copies of invoices from Northwest, Profile, or Pinnacle, along with any other details to Eileen O'Brien, BUSINESS WEEK Circulation Dept., 1221 Avenue of the Americas, New York, N.Y. 10020.

If you have questions about the status of your subscription or any renewal offers, please call BUSINESS WEEK's toll-free subscriber-service hotline—800 635-1200—between 8 a.m. and 4:30 p.m. EST.

For more than 60 years, BUSINESS WEEK has built a strong relationship with its readers. We aim to keep it that way. Thanks for your understanding and cooperation.


 Publisher

WHY GRAEF CRYSTAL LEFT FORTUNE...

In your story about compensation expert Graef Crystal ("Graef Crystal: Is he Paul Revere or Benedict Arnold?") Top of the News, Mar. 9), you state that Crystal, who was dismissed by *Financial World*, "quit a similar job at *Fortune* after alleging editorial interference over his conclusion that Steven J. Ross, CEO of *Fortune's* parent, Time Warner Inc., is overpaid."

In fact, Crystal made no such allegation. What he did allege was that a Time Warner business executive tried—and failed—to influence his conclusions. The distinction is supremely important.

Donald Guerette, Time Warner corporate compensation vice-president, has stated publicly that "Mr. Crystal, while writing his story for *Fortune* on executive compensation, called me for information that led to a discussion of his methodology. Other publications routinely call the company for similar purposes. We had an amicable, professional discussion. I strongly disagreed with his analysis at the time and in several further conversations."

We made absolutely no changes to the story as a result of these conversations. Our story, in the issue of June 17, 1991, said that Ross was not only America's highest-paid CEO in 1990 but also the CEO whose compensation most exceeded what Crystal thought it should be, on

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Readers Report

the basis of his computer model. When we went to press with the story, Crystal said he was very pleased with it and sent us a written proposal for an even more extensive CEO pay survey for 1992.

It was only one month later that Crystal announced to the press he would no longer prepare his annual freelance story for *Fortune*. He did this just after receiving what he called an "acrimonious" letter from Guerette, again criticizing his methodology. Although the editors were completely unaware of this letter, Crystal was presumably aroused enough by it to end his relationship.

To repeat, there was no editorial interference. Quite to the contrary, in his own letter to us declaring that he was leaving, Crystal emphasized that *Fortune's* "editorial integrity prevailed," and "if there is integrity in journalism, yours are the very brightest flames."

Marshall Loeb
Managing Editor, *Fortune*
New York

Crystal's response: The former consultant says that Fortune editors told him his story could be killed if he didn't make changes in his methodology. So he agreed to an "uneasy compromise."

whereby the estimated value of stock options granted Time Warner executives was to be staggered over three years, thus reducing their 1990 compensation as reported in the magazine, he says.

...AND WHY THE 'HEAVY ARTILLERY' HAS HIM IN ITS SIGHTS

Graef Crystal is Paul Revere! I was an expert compensation consultant the first 15 of my 25 years in general management consulting—first with McKinsey, then with Cresap. My primary objective for executive compensation design was the corporation's well-being.

By the end of 15 years, the field had become distasteful to me, and I abandoned it. To win assignments, expert consultants and lawyers, in my opinion, were subtly (or not so subtly) promising too much to top management teams.

I returned recently from several years abroad to find U.S. executive compensation at astonishing levels, even above what I could have expected from the trend of a decade ago.

U.S. executive compensation has gone way over the top. It is designed to ag-

grandize management. A self-interested coterie of expert "professionals" must bear much of the blame. Not surprisingly, the coterie seems to be mounting heavy artillery to "deep six" Crystal before he can upset their cozy, unexamined world.

Robert V. Good
Bakersfield, Calif

ARTIFICIAL INTELLIGENCE: CHEERS FOR LISP AND MINSKY

We appreciated your insightful observation that this technology has finally arrived for commercial applicability. But we want to point out an inaccuracy in your article on Marvin Minsky ("The father of AI says his child has gone astray," Special Report, Mar. 2). You state: "A series of startups that tried to commercialize [the Lisp programming language]... failed because the language was too cumbersome."

Symbolics was one of those startups and 12 years later customers, among them American Airlines, the Internal Revenue Service, American Express, Delta Air Lines, Lufthansa, U.S. Sprint, AT&T, Alcoa, and Houston Lighting & Power, still use Symbolics' Lisp-based

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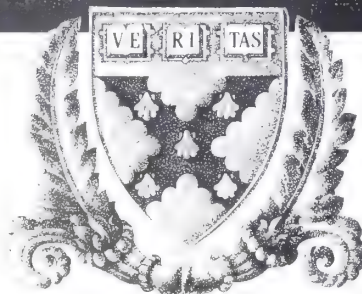
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Readers Report

technology to develop applications. We are not alone: Inference, Lucid and Franz, among others, are companies involved in artificial or "applied" intelligence that still use the Lisp language in their respective technologies.

Kenneth J. Tarpey, President & CEO
Symbolics Inc.
Burlington, Mass.

I was surprised to be quoted in your story as saying that Marvin Minsky's *The Society of Mind* was just a "philosophical poem."

I never used the word *just*. Here's what I did say: "Minsky, who is appropriately regarded as the 'father of AI,' has been an intellectual leader in each of AI's major movements. Thirty years from now, *The Society of Mind* will be one of the few landmark works in AI that we will remember. It is rich with profound ideas, from the practical to the philosophical, and reads like poetry."

In fact, I pointed out to your reporter that I have a habit of underlining what I regard as particularly noteworthy ideas. But I stopped doing this halfway through *The Society of Mind* when I realized that I had highlighted half of the sentences.

The words attributed to me in your article do not capture the essence of what I did say and believe.

Raymond Kurzweil, Chairman
Kurzweil Applied Intelligence Inc.
Waltham, Mass.

RAISING PRICES WON'T WIN MANY CUSTOMERS FOR DETROIT

Your writer is correct to say Detroit has an amazing ability to turn off potential customers ("Price hikes: Motor town may be shooting itself in the tire again," Top of the News, Mar. 2).

I'm a first-time new-car buyer myself looking to park my 1980 Toyota Corolla in favor of a Saturn SL2. But when I read that Saturn wants to hike prices, I can't help feeling that General Motors is still General Motors, out for profit and hey, sorry about a decade worth of crud-dy cars.

Come on down from the corporate suite, guys. There's still a recession on and buying a new car isn't something I take lightly. I want to help Detroit, but Detroit has to stop helping itself to my checkbook.

David Smethurst
Menlo Park, Calif.

Letters to the Editor should be sent to Readers Report, Business Week, 1221 Avenue of the Americas, New York, N.Y. 10020. Fax: (212) 512-4464. Telex: 12-7960, Intl. 4998204. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.

"The man who said the world will beat a path to your door if you build a better mousetrap was a poet, not a businessman.

The landscape is strewn with the wreckage of fine companies who built great products—that no one ever heard about.

"Most of our competitors of 1981 no longer exist. Some of them had great products. What they forgot to have was great advertising."



John Sculley, Chairman and CEO, Apple Computer, Inc.

I've worked for two of the most spectacularly successful corporations in America—Pepsi and Apple Computer. They're as opposite as East and West. But they have one thing in common. In both cases, advertising played a central role, rocketing them from obscurity to market leadership.

Each enjoyed product advantages. But they had to be advertised.

No other form of communication allows a purer, more powerful articulation of your product's story and your company's vision. Because only advertising can communicate not just information, but emotion and soul.

Something magical happens when you're able to touch millions of people at once—a transforming energy that not only makes sales today, but reverberates for years to come.

Advertising builds brands. And your brand is the only thing that stands between you and commodity pricing.

Advertising allows you to take on the giants and win. Goliath may not need great advertising. But David sure does.

Finally, advertising lets you express not only what you are, but what you are trying to become. It's not just a selling tool, it's a leadership tool—a flag on the mountain to rally and inspire your own people.

Of all the sophisticated tools available to marketers today, advertising remains one of the most powerful."



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MERCHANT PRINCES

By Peter C. Newman
Viking • 502pp • \$25

HOW HUDSON'S BAY LOST ITS WAY

No company in North America has a longer history than Hudson's Bay Co., and few boast one anywhere near as colorful. Launched in 1670 by King Charles II to exploit the lands around northern Canada's huge Hudson's Bay, this "company of adventurers" played a pivotal role in forming the country and its character. At its peak, HBC's empire encompassed one-twelfth of the world's land surface, the most ever controlled by any company. Today, drastically altered, it survives as one of Canada's leading retailers, with annual sales of more than \$4 billion.

Merchant Princes, the third and final volume of an exhaustive history by Peter C. Newman, Canada's foremost business journalist, is the extraordinary saga of HBC in the modern era, beginning with Canada's emergence as a nation in

1867. Newman is an assiduous researcher—he spent a decade on HBC's history—and a beautiful writer. His book is both compelling and thought-provoking.

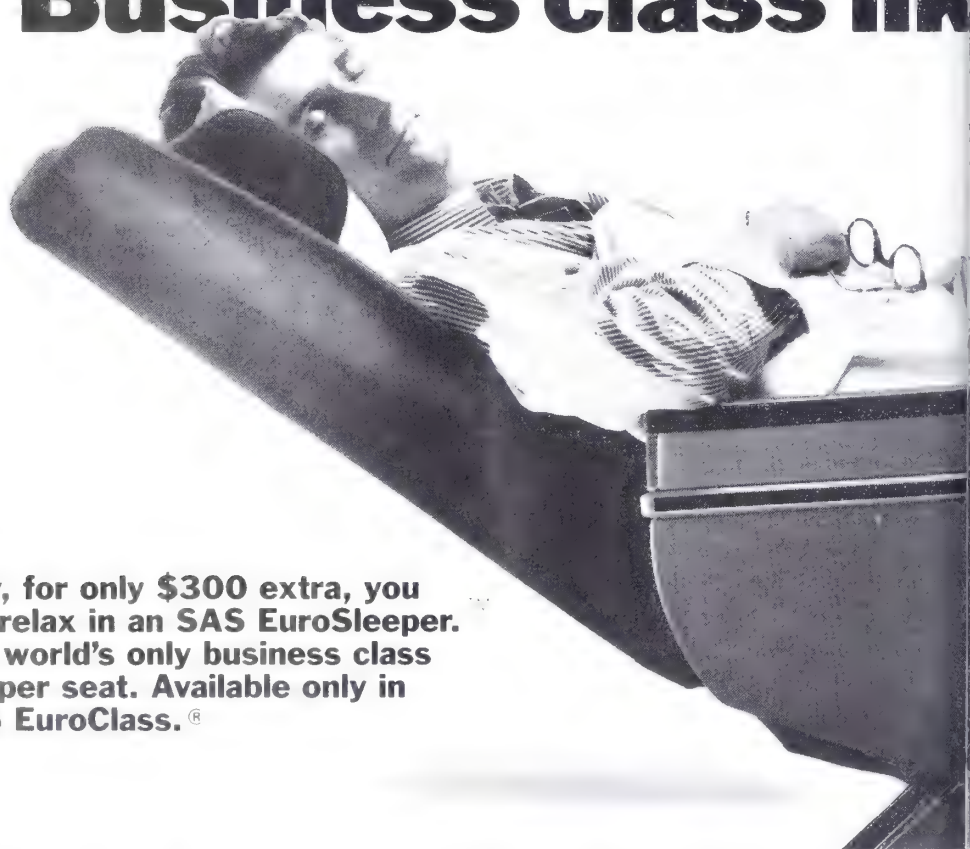
What makes it sparkle are Newman's portraits of the remarkable men who shaped HBC. Consider Donald Alexander Smith, who in 75 years with the company, from 1838 to the eve of World War I, became Canada's richest, most powerful man. He began as a fur trader in remote Labrador and, thanks to enormous energy, financial cunning, and the ability to cultivate powerful ties, rose to be HBC's London-based governor. In addition to remaking the company for the 20th century, Smith played a central role in financing the Canadian Pacific Railroad and, while Canada's High Commissioner to Britain, was chairman of what would become British Petroleum.

He was also a scoundrel who lined his own pockets. In 1878, he and three partners gained control of the nearly defunct St. Paul, Minneapolis & Manitoba Railway for \$283,000. Smith then exploited his connections to win rights to use a branch line linking their railroad with the Canadian Pacific, giving them a big share of the freight moving into western Canada. Within 10 years, the railroad was worth \$60 million. In the next 30 years, it earned Smith and his partners \$500 million. "Even considering the gutter ethics of late 19th-century railway promotion [this ranks] as the most shameless of swindles," Newman writes.

Then there were the men behind HBC's last big fur-trading adventure—opening up the Canadian Arctic in the late 1800s. In the process, the company built over 200 posts in the Arctic and forever altered the way of life of the native Inuit, converting them from subsistence hunters living in small groups to trappers congregated in villages, dependent on the HBC trading posts.

HBC traders lived an arduous existence. Because HBC didn't want the Inuit relaxing instead of trapping, it didn't heat its stores. Even on mild winter days, the temperature inside could be 20 be-

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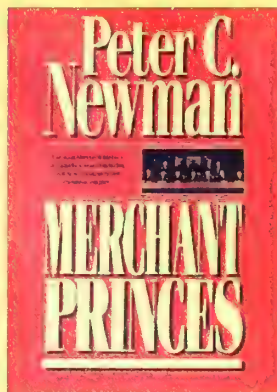
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And the posts were remote, HBC's traders little contact with the outside world. What they have was incredible power over the Inuit, being not only as shoppers but as bankers, doctors, and often, the fathers of their children. Moving to the present, *Merchant Princes* offers the first detailed portrait of Kenneth R. Thomson, media baron (he's chairman of Thomson Corp.) who bought 75% of HBC in 1979. Canada's richest man, Thomson, like "a small-town teller living near the poverty line," Newman writes. He often eats in the kitchen of his Toronto mansion to save electricity. Since Thomson gained control, HBC has gotten out of the fur business and sold its Northern Stores Division, which served the area of northern Canada covered by HBC's original charter. Links to a 300-year tradition are few. What's left is a collection of department and discount stores. The chief weakness of Newman's trilogy is its length. A well-edited one-volume

Isolated in London
and lulled by success,
the company's leaders
passed up remarkable
opportunities



edition would serve most readers far better. Still, *Merchant Princes* contains the trilogy's most thought-provoking section: Newman's commentary on HBC's achievements. The company, Newman laments, has failed to exploit many of its remarkable opportunities.

For nearly 300 years, the company dominated the world fur trade, yet never made a fur coat. And chiefly because Smith was busy pursuing his own fortune, the company passed up a chance to play a pivotal role in building the Cana-

dian Pacific, the key artery in the growth of modern Canada. In the mid-1920s, it leased its cache of oil and gas reserves to what became Continental Oil, and soon Continental's assets were worth 10 times as much as HBC's. The fact that the company was headquartered in London until 1970 isolated its leaders. The weight of HBC's tradition and long success also blinded them.

Merchant Princes underscores the need for companies to adapt to changing situations. One

need look no further than General Motors Corp. to see how the mighty can stumble, and history is littered with the skeletons of once-powerful corporations undone by complacency. Hudson's Bay Co. has managed to survive. But in the end, Newman writes, it mirrors Canada itself: "a great might-have-been company in a great might-have-been country, both facing an unpredictable future."

BY WILLIAM C. SYMONDS

Symonds is *BUSINESS WEEK's* Toronto bureau manager.

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MARY S. BECKER



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...ckups or get
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...r schooling

Although the federal welfare program is called Aid to Families with Dependent Children, it isn't structured to encourage welfare families to help their children. The system should be reformed with the focus placed where it belongs: on children rather than on parents.

Several provisions of the traditional welfare system are not simply neutral with respect to children: They're damaging. In one well-known example, which was in effect until recently, more than half the states denied benefit payments to mothers who lived with their husbands. The unintended consequence was to encourage couples to split up in order to qualify for benefits—despite growing evidence that young children, especially boys, are harmed when reared only by a mother. Fortunately, a reform in the Family Support Act of 1988 requires states to allow intact families to be eligible for support.

We need to recognize that poor families respond to appropriate incentives—something implicitly denied by the present system. To provide welfare recipients with proper incentives, families that look out for the children's interests should get additional payments. For example, benefits might be larger if the parents take children for regular health checkups, if the children have good school-attendance records, if parents participate in school programs, or even if children get good grades and perform well on achievement tests. On the other hand, benefits could be cut or eliminated altogether if parents take drugs or drop out of high school.

There is plenty of evidence that performance in school is greatly improved when students attend regularly, especially if parents take an interest in school activities. Successful private and public schools have demonstrated that parental involvement can significantly raise the achievements of children from even the poorest families.

OPTING OUT. Proposed changes in California, Connecticut, Wisconsin, and other states—generally those with the most liberal benefits—would penalize families who do not do right by their children. New Jersey has recently taken a different tack by passing a measure that denies greater benefits to women who have additional children while on welfare.

Until New Jersey acted, all state-welfare payments increased according to the number of dependent children, which provided a motive for welfare mothers to have more and more babies. The New Jersey measure removes that monetary incentive. Perhaps more important, it sends a message that women who aren't self-sufficient should not have chil-

dren. Of course, some women may have several children before going on welfare or while temporarily off.

Some critics claim that the radical changes proposed in various states pander to middle-class prejudices against poor families and welfare. Such attitudes probably have helped these measures gain support. Yet many poor families apparently do not like the present system, either. A telling statistic is that almost 40% of families eligible for welfare opt not to participate. Some may not know they are eligible, of course, but information about welfare eligibility has been widely circulated. I believe the majority of nonparticipants conclude that on balance, they would be made worse off by signing up.

ENDLESS CYCLE. How can a family be hurt by receiving monthly checks from the government? Among the tangible drawbacks are provisions allowing families on welfare to work only part-time and reducing benefits for those with larger earnings. And working less now reduces the chances of becoming self-sufficient later on. That's because future earning power is greatly reduced when a person has been out of work for an extended period, or has worked only part-time or sporadically. One cannot acquire needed job skills, which are developed only by working for a prolonged period at a job or in an occupation. Economist Seth Sanders of Carnegie Mellon University has shown that this helps explain why families refuse to go on welfare, as well as why families on welfare for several years are unlikely to go off: They become less and less capable of supporting themselves.

Some eligible families do not apply for welfare because it erodes a family's values and self-respect. This may be partly because of the social stigma of being on welfare, but I believe it is mainly because some parents conclude correctly that welfare handouts badly affect their own and their children's motivation to help themselves. They decide that the harmful effects are too large a price to pay for welfare checks.

If this is true, then families who do join the welfare rolls tend to be the ones who are least concerned about their children and least willing to help themselves. They most need financial and other pressures—both carrot and stick—to induce them to take better care of their children.

The American people want to help needy children, but they are right in sensing that the present welfare system fails to do this. Reforming the system to concentrate on improving the skills and health of children would remove much of the hostility to welfare.

MARY S. BECKER IS PROFESSOR OF ECONOMICS AT THE UNIVERSITY OF CHICAGO AND A FELLOW OF THE OVERSEAS RESEARCH INSTITUTE.

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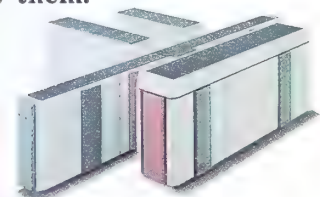
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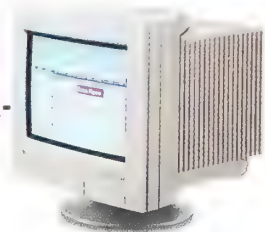
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THE WHOLE WORLD IN YOUR HAND

NEC

BY GENE KORETZ

IT'S GETTING HARDER TO PUT YOUNG AMERICA TO WORK

It was only three or four years ago that fast-food stores and other employers were complaining of a shortage of teenagers to staff their operations. No more. The economic malaise of recent years has had a devastating effect on the employment ranks of America's youth (chart). Since January, 1990, employment of those 20 years old and over has actually risen a bit, while the number of 16-to-19-year-olds with jobs has shrunk by 1.14 million.

Much of that decline, some 831,000, has occurred since the recession began, a period in which the ranks of employed 20-to-24-year-olds also fell, by 626,000. Indeed, the total job losses experienced

labor force entirely. But this time around, labor force participation by both teenagers and 20-to-24-year-olds began to decline in mid-1989, well before the contraction began. And their participation rates are now lower than the nadir in the early 1980s, when the downturn was far more severe. "Such developments," says Harvard University economist Richard B. Freeman, "suggest that we may be seeing a long-term trend, as all kinds of jobs for low-skilled workers continue to disappear."

Other factors are also at work. Economist H. Erich Heinemann of Ladenburg, Thalmann & Co. cites the 27% increase in the minimum wage since 1989. And Edward Yardeni of C.J. Lawrence Inc. notes the sharp 424,000-job decline in retail employment since early 1990. "Teenage jobs are mainly retail jobs," he says "and the ongoing retrenchment in retailing suggests that retail job growth will stay weak."

More teenagers are also staying in school. Labor Dept. economist Steven Haugen notes that a record 60% of recent high school graduates enrolled in college—a move probably inspired by the relatively poor job prospects for those with only high school diplomas.

And George Washington University's Sar A. Levitan notes that many laid-off older workers are now taking low-wage jobs that were formerly reserved for youths. In today's poor job climate, he speculates, "the huge bulge of baby boomers in their prime working years may be crowding out both younger workers and those over 50."

Whatever the cause, Levitan points out that high unemployment and low labor force participation among teenagers does not bode well for their future. "Half of our youngsters do not go on to college," he notes. "If their job prospects remain poor, their future earnings, work effort, and attachment to the labor force will suffer."

February. He also points out that most of the growth occurred in M1, the narrower monetary aggregate, suggesting that many people have reacted to the steep decline in open-market yields by moving out of Treasury issues and parking their cash temporarily in checking accounts. And the sharp pickup in mortgage refinancing has sparked a need for ready cash to pay points and other closing costs.

In short, says Sullivan, "the recent pattern of money growth may turn out to be a transitory phenomenon, with little significance for the business outlook."

THEY'RE POUNDING THE SIDEWALKS OF NEW YORK

It's hardly news that the Northeast has suffered during the recession. But economist Philip Braverman of PKB Securities Corp. points out that New York State and the Big Apple were particularly hard hit last year.

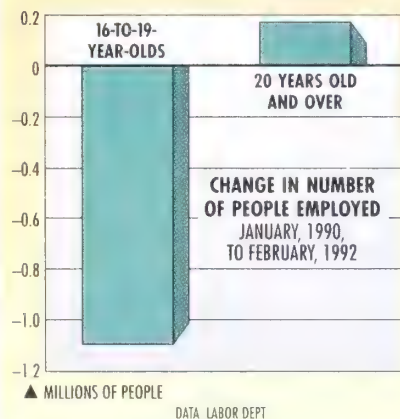
According to the Labor Dept.'s household survey, notes Braverman, the nation lost 748,000 jobs last year while New York State lost 318,000—more than any other state. In other words, "New York's employment decline was equivalent to a horrendous 43% of the total jobs lost in the nation in 1991—the state's worst experience since the Depression." Moreover, two-thirds of the state's job losses occurred in New York City and Long Island—areas heavily affected by the troubled services, construction, and defense industries.

SOME BIG PAYROLLS ARE ACTUALLY GETTING BIGGER

Call it Gresham's Law of journalism: Bad news drives out good news. According to *Human Resource Executive* magazine, 22 of the nation's top 50 employers, including IBM, General Motors, May Department Stores, and McDonnell Douglas, cut their payrolls by 145,000 last year. Such layoffs, of course were widely reported in the press.

Receiving less media attention, however, was the fact that 17 of the top 50 employers actually expanded payrolls. The magazine reports that this group—led by such heavyweights as PepsiCo, Boeing, Kmart, GTE, United Parcel Service, Wal-Mart Stores, and Philip Morris—added nearly 205,000 jobs during 1991. The result among the top 50: a net increase of some 60,000 jobs.

TEENAGERS TAKE THE BRUNT OF JOB LOSSES



by these two age groups exceeds the nation's overall employment decline of 1.23 million since June, 1990, indicating that employment of older Americans has actually risen by more than 100,000.

To some extent, the job woes of America's youth reflect cyclical and demographic factors. Young people are usually laid off first during recessions. Most teenagers have few skills and a weak attachment to the labor force, while workers in their early 20s are only a little better off and lack seniority. Moreover, the teenage population has declined by some 850,000 in the past two years. Still, the loss of jobs by teenagers has been unusually sharp, accounting for much more of the overall decline in employment than in past downturns.

Layoffs and poor job prospects during recessionary times normally lead many teenagers and young adults to leave the

IS THE RISE IN THE MONEY SUPPLY FOR REAL?

Among signs of a pickup in business activity, economists are pointing to a sharp acceleration in monetary growth in February. According to the Federal Reserve, the M2 money supply rose by \$25.6 billion in February, its biggest monthly gain in over four years.

Economist William V. Sullivan Jr. of Dean Witter Reynolds Inc. notes, however, that some of the growth reflected a surge this year in early tax refunds, which were up nearly \$8 billion in

A-BOOM! THE REBOUND IS UNDER WAY

After looking at the February report on retail sales, a Wall Street economist cautioned that the robust numbers might be "a flash in the pan." In all due respect, it was more like the stove blew up. Retailers recorded a sales gain of 1.3% in February, the Commerce Dept. revised its January numbers simply higher to show a jump of 2.1%, instead of the best 0.6% increase originally reported. Even if buying slows off in March, sales are now headed for the largest quarterly advance in 5½ years. That's more than a flash.

Retail sales were only one in a series of resounding February reports that strongly suggest that the economy is finally breaking out of its three-year stagnation and moving to a higher plane of growth. Other evidence: The pace of homebuilding has quickened. The yearend buildup of unwanted inventories is almost gone. Industrial production has bounced

And all the while, inflation continues to abate. Some of that Wall Streeter's caution is justified, though. The latest data probably exaggerate the economic strength. An extra day because of leap year, the coldest winter in 97 years, early tax refunds, and last year's war-depressed numbers, all play a role.

However, the size and breadth of the gains and their arrival on the heels of last year's substantial easing of monetary policy also justify optimism. The Federal Reserve's latest survey of business conditions says as much. It shows "some improvement in economic conditions" since the end of January.

CHRISTMAS SEASON IN JANUARY, FEBRUARY But is this the start of a self-sustaining process that generates a true and lasting recovery? So far, the data point in that direction (page 20). First-quarter gross domestic product is shaping up to show a healthy combination of strong final demand and low inventories that bode well for real GDP in the second quarter.

It all starts with consumers. The numbers show that the gains and extra cash from debt refinancings are giving a broad lift to spending (chart). Stronger demand and earlier production cuts have trimmed inventories, especially those of retailers. All this sets up favorable conditions for growth in output, jobs, and incomes that will help the economy maintain its new momentum. After retailers' disastrous holiday season, it looks as if

households celebrated Christmas in January and February. Gains in retail sales were especially strong in building supplies, furniture, appliances, and clothing—areas where buying turns with the business cycle. These gains indicate a pickup in discretionary spending for items that consumers usually postpone when times are tough.

But times may not seem so tough anymore. A preliminary reading of the University of Michigan's index of consumer sentiment showed higher spirits in early March, including a big gain in consumers' expectations for the future. Also, the Conference Board says its February index of consumer confidence may be revised upward, as late-arriving responses at month's end were more upbeat than those earlier in the month.

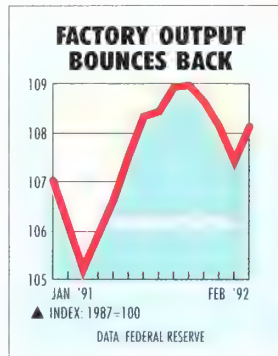
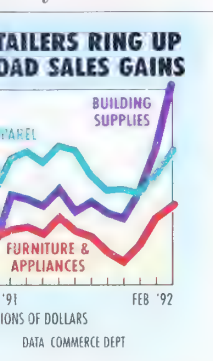
Consumers, whose spending is two-thirds of real GDP, are giving the first quarter a bigger lift than expected. Real retail sales are rising at a rate that is consistent with a quarterly increase in real consumer spending at an annual rate of 4% to 5%. Even with the slowdown in inventory growth, first-quarter real GDP could end up growing 2% to 3%. That's far above the 0.4% average expected by economists surveyed in the March issue of *Blue Chip Economic Indicators*.

However, consumers aren't capable of maintaining their spending at that first-quarter pace, since it is so far above the growth of their incomes. Because huge debt has made households hesitant to borrow, and because savings are already low, consumers will depend heavily on income growth to finance their outlays. And that is a chief reason why consumers will lead what is likely to be a historically slow and uneven recovery.

WATCH NEW SMOKE RISE FROM THE STACKS

For now, though, the pickup in consumer spending on goods enhances the outlook for the industrial sector. Factory output in February recouped some of its recent losses (chart), and strong retail buying is paring down unwanted inventories, clearing the decks for future demand to spur new orders and production. Stockpiles held by manufacturers, wholesalers, and retailers fell 0.4% in January, the first decline in seven months.

Retail inventories, which began to bulge late last year in the face of weak sales, accounted for half of the January liquidation. The ratio of retail inventories to sales had surged by December, indicating an excess. In

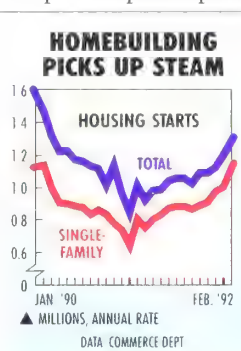


Business Outlook

January, however, the ratio fell sharply. Since February sales probably trimmed retail stock levels further, the monthly ratio very likely fell to a four-year low.

That's a good sign that industrial production will post further gains this spring. Output at factories, utilities, and mines rose a broad 0.6% in February after three months of losses. A rebound in auto output accounted for half of the month's gain, but production elsewhere recovered some of the previous months' declines.

Autos and home goods are set to lead the coming output gains. Detroit assembled cars at an annual rate of 5.4 million in February, up from 5 million in January. But car sales in early March were at a 6-million rate. With car inventories under control, there is room for output to pick up. Supplier industries will also benefit.



The housing rebound is playing its typically important role in the recovery. The broad impact of rising home sales and construction shows up in both retail sales and industrial production. Production of durable consumer goods other than cars rose a strong 5.7% in February, with large gains in items such as appliances, furniture, and other home furnishings.

The pace of homebuilding has accelerated. Housing starts jumped 9.6% in February, to an annual rate of 1.3 million, with gains in every region. Starts had risen by 6.4% in January and by 3% in December. Starts in the key single-family sector rose a thumping 14.7% in February to the highest level in three years (chart).

Low interest rates and income gains have boosted housing affordability, and the recent rise in rates undoubtedly pushed some home buyers into the market for fear that rates had bottomed out. The rate rise will have some depressing effect, but the housing outlook remains

bright. The Mortgage Bankers Assn.'s index of mortgage applications for home purchase had fallen during February, but it resumed its rise in early March.

Interest rates have probably bottomed out for this business cycle. The strength of the recent economic data kills any chance for further easing of short-term interest rates by the Federal Reserve.

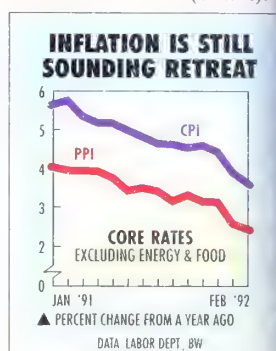
THE FED MAY REST ON ITS LAURELS

As for long-term rates, progress on inflation will tell the tale there. Once the bond market is convinced that prices are well under control, some of the upward pressure on long rates should ease. The latest price indexes show that the trends for both the producer price index and the consumer price index are headed down (chart).

One reason: Industry has a lot of idle capacity. The industrial operating rate rose to 78.2% in February, but that is far below the 83% level linked to tight conditions that foster price hikes. It's little wonder that the core rate of producer-price inflation, excluding energy and food, stood at only 2.4% in February—a four-year low.

Consumer inflation is also abating. The consumer price index rose 0.3% in February. The core CPI rose 0.4%, pushed up by a 1.5% jump in clothing prices due to earlier-than-usual introduction of spring lines. Core inflation has plummeted during the past year, from 5.7% to 3.6%—the lowest rate since 1983.

From here on, the Fed is likely to sit back and keep an eye on what it has wrought. It is undoubtedly looking for an unusually modest recovery. Moreover, three years of subpar economic growth have greatly eased price pressures. That's why the fireworks from the recent data aren't about to spark an explosion in inflation.



THE WEEK AHEAD

CAR SALES

Tuesday, Mar. 24

Sales of domestically made new cars probably edged up slightly to an annual rate of 6.2 million in mid-March, say economists surveyed by MMS International, a division of McGraw-Hill Inc. Car sales stood at 6 million earlier in the month and 6.2 million for all of February. Although the recent sales data show improvement, demand for U.S. cars remains tepid.

DURABLE GOODS ORDERS

Wednesday, Mar. 25, 8:30 a.m.

New orders placed with durable goods manufacturers likely increased by 1.5% in February. That's suggested by the 1%

jump in durable goods output for the month. Orders increased by 2.2% in January. The expected back-to-back increases in new demand suggest that the backlog of unfilled orders probably increased in February for the first time since August, 1991.

CORPORATE PROFITS

Thursday, Mar. 26, 8:30 a.m.

The MMS consensus is that aftertax corporate profits were virtually flat for the fourth quarter. Profits had increased 3.8% in the third period, but that followed two sharp drops in the first half of 1991. Corporate earnings may be set to recover this year, thanks to improved economic conditions, two years of cost-cutting, and lower interest expenses.

PERSONAL INCOME

Friday, Mar. 27, 10 a.m.

Personal income is expected to rise by a healthy 0.6% in February, says the MMS report. That's suggested by the increase in payrolls and weekly wages for the month. Personal income had fallen by 0.1% in January, but it jumped 1% in December. The economists are also expecting a strong 0.8% rise in consumer spending in February. That's indicated by the surprising gain in retail sales and expected faster growth in service spending. The upward revision in January store sales suggests that consumer spending, estimated to have increased 0.2% in January, will be revised up sharply for that month.

LOOK FOR A WEDGE AND A SPLASH,
AND FIND THE HIDDEN PLEASURE
IN REFRESHING SEAGRAM'S GIN.

Got it?
Now head for
the 19th hole.



THE RECOVERY IS HERE AT LAST

EVIDENCE IS MOUNTING—FROM HOUSING, PLANT OUTPUT, AND EMPLOYMENT

John P. O'Leary doesn't need government forecasts to tell him where the economy is going. Since early February, the chief executive of Tuscarora Plastics Inc., a packaging-material maker, has seen shipments and new orders take off. That's all the data he needs. "Our business indicates that the economy is getting better," he says.

Just two weeks ago, O'Leary's assessment might have seemed like just so much wishful thinking. But then, on Mar. 12, the Commerce Dept. announced that retail sales had jumped 1.3% in February, on top of a 2.1% surge in January (page 17).

Five days later, in a St. Patrick's Day trio of reports, came more good news: Industrial production picked up by 0.6% in February—its first rise in five months. Housing starts soared by 9.6% during the month, to an annual rate of 1.3 million—the busiest pace for builders since March, 1990. And consumer prices climbed just 0.3% in February, implying a modest inflation rate of 3% annually.

On Mar. 18 came yet another piece of evidence: The Federal Reserve's survey of activity within its 12 regions was also upbeat. In their "Beige Book," the central bankers reported a "slow but widespread advance in the economy since the end of January."

SECOND COMING. So listen up, America: Just as spring arrives, it's looking as if the economy is at last on the mend. The thaw comes after 19 months of recession and stagnation—possibly the longest postwar slump on record. The brutal retreat sent 1.5 million people to the unemployment line, put some 148,000 companies out of business, and made American consumers feel glummer than they had since 1974—on the heels of Watergate, the first oil crisis, and severe recession.

Indeed, convincing consumers that the recession has ended may be the hardest part about keeping this expansion going. After all, the promise of a rebound sounds eerily familiar. Last spring, citing increased industrial production and

rising retail shopping, economists and Washington policymakers declared the recession over. But by fall, the U.S. economy was again dead in the water.

This time, economists spot one big difference: a more accommodating Federal Reserve (page 22). "The Fed has eased much more dramatically in the past year than in the year before," says Nancy R. Lazar, an economist at the International Strategy & Investment Group. Indeed, the federal funds rate—the rate banks pay to borrow from other banks—now stands at 4%. That's roughly half its level in late 1990 (chart).

The result? Consumers and businesses have cleaned up their balance sheets by replacing high-yield borrowings with

cheaper debt. DRI/McGraw-Hill estimates, for instance, that household net worth grew by 6.6% in 1991, after falling in 1990 for the first time since 1962. "Cash flow has been substantially enhanced by mortgage refinancings, paying down debt, and tapping into home-equity loans," observes Michael R. Paslawskyj, chief economist at CIT Group, a lender to midsize companies.

NEW HIRES. All that extra cash has sent consumers back into the malls, edging into auto showrooms, and thumbing through real estate listings. Although they're not gobbling up goods and services the way they did in the '80s, there are signs of a new willingness to spend. Take Mark and Laura Greifenkamp. The couple recently bought a Saturn, even though they could have afforded a more expensive car. And they are about to close on a \$225,000 house in the Chicago suburb of Western Springs. Mark Greifenkamp, a supervisor at hospital supplier Baxter International Inc., expects that after they move in "we'll spend another \$5,000 in the blink of an eye."

Even the employment picture seems brighter—another important distinction between last spring's false start and this year's upturn. The economy slipped back into recession last fall partly because American business continued to lay off workers. That hammered personal incomes and slammed consumer spending.

Now, signs of life are sprouting in the labor market: Nonfarm employment rose by 164,000 jobs in February—although economists warn that the bulk of those new hires came in the retail sector, where work is often part-time. But looking ahead, Stuart G. Hoffman, chief economist at Pittsburgh's PNC Financial Corp., thinks that at least 100,000 new jobs will be added, on average, in each of the next few months.

Indeed, businesses, particularly small and midsize outfits, say they're getting ready to hire again. Acme Brick Co. in Fort Worth may be adding 120 workers to its payroll of 1,500. That means the



MANUFACTURING

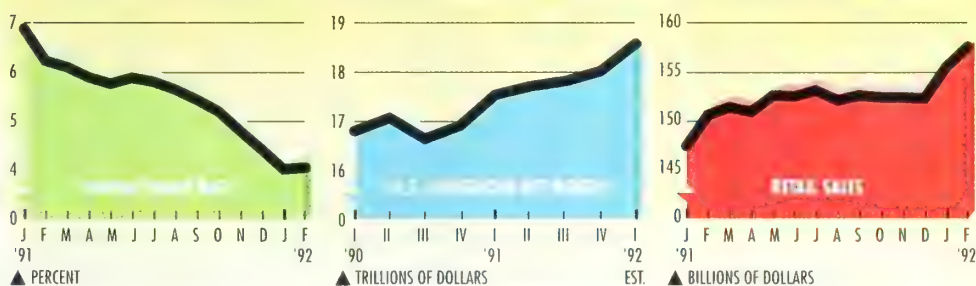
AFTER A FOUR-YEAR SAG IN SALES, THE FURNITURE INDUSTRY LOOKS FOR NEW BOUNCE. IN 1992, MANUFACTURERS ARE CAUTIOUSLY PROJECTING A 3.7% INCREASE IN SHIPMENTS



RETAILING

BIT OF EXTRA CASH
S SENT CONSUMERS
CK TO THE MALLS. PLUS,
HERE IS A REPLACEMENT
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FRIGERATORS—THAT
OPLE BOUGHT IN THE
80S ARE GETTING OLD'

EASIER CREDIT... ...AND RICHER FAMILIES... ...SPARK SPENDING



DATA: FEDERAL RESERVE, DRI/MCGRAW-HILL, COMMERCE DEPT

pany, a unit of bootmaker Justin In-
ries Inc., should operate its 16
s at about 80% of capacity within
next month, up from 72% now. "I
cautiously optimistic," says Presi-
Edward L. Stout Jr.
mes are also busier at Crown Equip-
Corp. in New Bremen, Ohio. In
uary, the maker of electric lift-
s called back 120 of the 400 work-
t had laid off last year. And in Bea-
Pa., the engineering firm of Michael
er Corp. plans to add 260 to 390 new
oyees to its work force of 2,600.

SE RULE. Amid all the evidence of a
ing recovery, however, there lurks
oiler: long-term interest rates. Bond
ers, worried about inflation and a
sive supply of Treasury debt, have
ong rates up above 8%. After adjust-

ing for inflation, real interest rates are
at about 5%—the highest level since
1988. The Fed, which has little sway
over long rates, is anxious about Wash-
ington's pileup of IOUs. Fed Chairman
Alan Greenspan worries that new Treas-
ury borrowings, along with a return of
corporations to the credit markets, could
cause some crowding out and keep long
rates higher and economic growth lower
than normal.

One concern is that housing, a key
component in a recovery, will take a big
hit if mortgage rates climb much higher
than 9%. For now, the rebound in hous-
ing is spurring a pickup in the produc-
tion of related items. Appliance output
jumped 4.6% in February, for instance,
and furniture makers are seeing better
demand. The American Furniture Manu-

facturers Assn. is cautiously projecting
a 3.7% increase in shipments for 1992.
That would be welcome relief after the
industry's four-year downturn.

That's some slump. And it's the very
duration of the nation's downturn that
has economists convinced the upturn is
really here. "There is a replacement
cycle. The big-ticket items—the cars, the
refrigerators—that people bought in the
1980s are getting old," says PNC Finan-
cial's Hoffman. More important, say other
economists, the U.S. economy has
had time to get its financial house in
order. Last year was simply too early
for an upturn. This spring, it looks as if
the recovery has taken root for good.

*By Kathleen Madigan in New York, with
Zachary Schiller in Cleveland, Wendy
Zellner in Dallas, and bureau reports*

MONDAY MORNING QUARTERBACKING AT THE FED

It's examining its recession performance to hone future policy

Alan Greenspan has practically copyrighted the ambivalent phrase "cautiously optimistic." But on Mar. 3, the Federal Reserve Board chairman didn't waffle, if only for a moment. Looking back on the Fed's handling of the economy during three years of sluggish growth, financial shocks, and a recession, Greenspan declared he wouldn't have changed a thing. "I honestly cannot say that we did something which I'd like to go back and revisit," he told Congress' Joint Economic Committee.

Indeed, while Congress and the Administration gripe that the Fed didn't do enough to fight the 19-month recession, central bankers defend their record, saying they were maneuvering through an uncertain world of financial instability. Even so, the charges have sparked an internal Fed debate over how the institution should change to nurture the newborn expansion.

Insiders acknowledge, for instance, that the Fed needs to pay more attention to developments in the financial system. Despite the obvious distress last year in the banking industry, the Fed failed to realize that banks would be reluctant to lend—even when the central bank was providing a flood of new money. The resulting credit crunch helped choke off last summer's fledgling recovery. Then, policymakers lost weeks debating whether a slowdown in money-supply growth was real or illusory (chart).

GLOOM. When the Fed finally reacted, Greenspan's repeated small rate cuts failed to give the economy the psychological boost it needed. Still, Greenspan, who continues to believe that the gulf war triggered the recession, has no second thoughts. As he sees it, the recession wasn't just cyclical but compounded by businesses and consumers who put the brakes on borrowing, slashing spending, and paying down debt.

Meanwhile, the huge flow of bailout funds moving into the thrift industry confused the mon-

ey-supply data and misled the Fed. And widespread gloom about the economy's long-term future chilled both consumer and business confidence. Greenspan feels that the Fed faced these problems alone, since the federal deficit ruled out stimulative tax cuts or spending. As the chairman tells associates, the Fed had to use up much more of its ammunition—cuts in rates and bank reserve requirements—than he expected.

But critics question whether Greenspan deployed his arsenal wisely. The Fed cut short-term rates a lot—from 8.5% to 4%—but slowly, in 16 small steps over two years. "If they had eased the same amount, but sooner, the economy would have recovered months ago," says Darwin L. Beck, financial economist for First Boston Corp.

WAITING GAME. The timid easing frustrated even those who felt that some caution was justified. In meetings last fall of the Federal Open Market Committee, presidents of the regional Fed banks raised reports of economic hardship. "Then Alan would say: 'I agree that we need to act, and I recommend a quarter-point cut,' and they would all just nod," says one staffer. Those tiny cuts never registered with the public and conditioned the markets to wait for more cuts. "People were looking for some leadership, and it didn't come," says a former Fed governor.

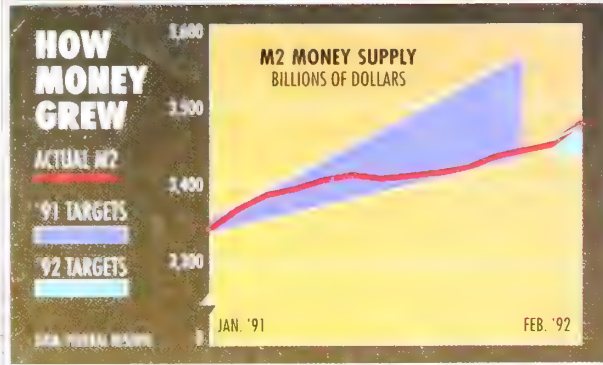
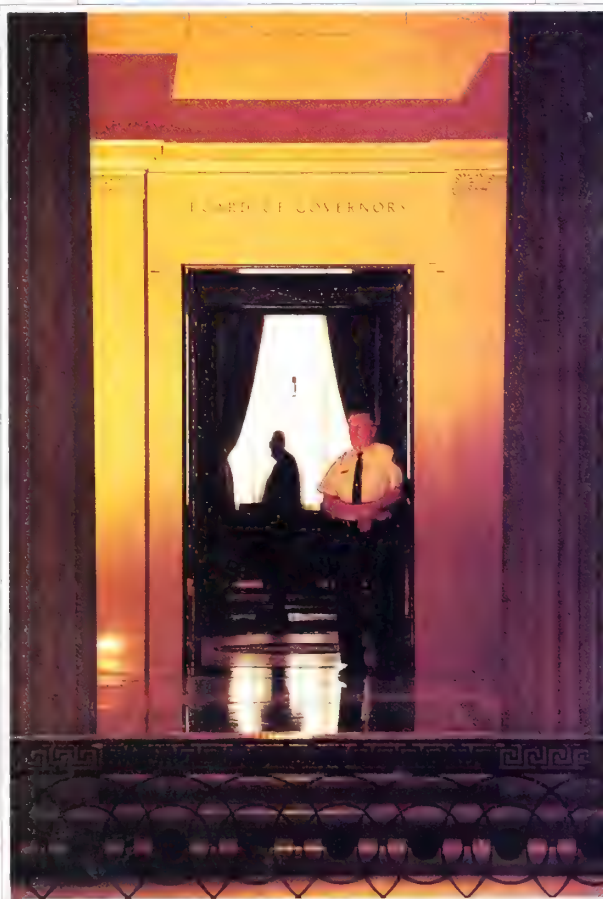
The issue was finally forced in mid-December. "The markets were telling us: 'Figure out where you're going, and get there,'" says a top Fed official. So, with Greenspan's tacit approval, Vice-Chairman David W. Mullins Jr. urged a move that would "ring the bell"—a full-point cut in the discount rate. The Fed's Dec. 20 cut set off the wave of mortgage refinancings, bond issues, and home buying that spurred recovery.

Did the experience doom Greenspanian gradualism? Probably not, but it has launched a debate. Advocates of bolder action note that bond markets rallied after Dec. 20 despite Greenspan's fears that such a large cut would panic traders. "Gradualism is not the only game in town," says a Fed official.

Other lessons from the recession are less controversial. The credit crunch highlighted the need for the Fed to step up its monitoring of banks. And the weak link between M2 and economic growth has led to deeper examination of how the money supply is shaped by shifts in funds from bank accounts to other investments.

But perhaps the most important change at the central bank is the acknowledgment that in a rapidly changing economy, the Fed must constantly reexamine its assumptions. That new flexibility could prove to be good news for a sustained recovery.

By Mike McNamee in Washington



TAKING BILL CLINTON'S MEASURE

ASSETS

POLITICAL OPERATION The class of the field, Democratic or Republican. Clinton's campaign organization has plenty of money, knows how to strike back

OLIDARITY Not since 1976 have Democrats been this united. Clinton has energized Democratic base. Republicans are uncharacteristically unruly

BACK OPPONENT Bush has frittered away many advantages of incumbency. And his vaunted campaign organization continues to misfire

LIABILITIES

CHARACTER QUESTION Following allegations of marital infidelity and draft dodging, Clinton's negative rating among voters has climbed to dangerous levels

WICK WILLIE' Clinton shifts from Southern moderate to traditional Democrat with ease. But in the year of the antipolitician, that skill could backfire

HILLARY FACTOR A big hit when the campaign began, Hillary Clinton is now a problem because of her law practice and sharp tongue

DATA BW



THE TROUBLE WITH BILL

Despite Clinton's strengths, doubts about his character will dog him

Bill Clinton hears music, and the refrain is sweet. Fresh from crushing victories in the Mar. 17 Texas and Michigan primaries, the Arkansas governor ironically is being serenaded with the first plaintive strains of "Anyone but Clinton" chorus. Paul Simon and Jerry Brown are resorting to the chant, warning that a man who seems to have taken up the Democratic nomination has character flaws enough to doom him in November.

Even Clinton's resiliency, the Stop Clinton movement is destined to fizzle. Political pros predict that he will roll on to the nomination, and, barring another brush with scandal, could mount a serious threat to identify Bush in the fall. Clinton will have half of the 2,144 delegates needed to win the nomination, and could earn the *coup de grâce* to Tsongas in New York primary on Apr. 7. Says top Bush adviser: "This is going to be a Bush-Clinton race."

In the view of White House strategists, that's a contest President Bush could win. But voters are still flashing contradictory messages that should give Bush pause. While the President squashed Pat Buchanan's insurgent bid in the Midwest, fury over the House banking scandal (page 62) and politics-as-usual boiled over. In Illinois, Senator Alan J. Dixon and two other veteran Democratic con-

gressmen lost races to anti-Washington challengers. This holds peril for a President who's the consummate insider—and who has seen three members of his Cabinet enmeshed in "Rubbergate."

So why do many leading Democrats feel queasy about Clinton? They fret that the controversy over Clinton's lifestyle and ethics, and the 25% negative rating he has acquired while defending himself, will give the Republicans too much ammo in the fall. "You have to wonder how many more wounds he can sustain," says Democratic

pollster Alan Secrest. Counters top Clinton strategist James Carville: "Our negatives are lower than they've been in six months, and they're declining."

TABLOID TARGET. Anxiety will remain Clinton's constant companion all the way to November. His next hurdle is New York. Neither Brown nor Tsongas poses much of a threat. But Governor Mario M. Cuomo has sniped at Clinton since the campaign began, and he may devise new tortures for the Arkansan. Meantime, New York's tabloids will be digging for fresh dirt. "Politics can get pretty rough here," smiles Democratic State Chairman John Marino.

Clinton's assets are impressive (table). He's smart, tough, and superbly organized. He's capable of lightning-quick counterpunching that could bloody Bush in the fall. Even one top Bush strategist

concedes: "Clinton may be the best pure politician we've seen in decades."

And with his message of economic renewal, Clinton has found a theme that energizes his Democratic base. The keynote—one that's been missing in previous Democratic campaigns—is optimism. His program combines traditional liberal notions of fairness with bootstrap conservatism. There are tax incentives to revitalize inner-city neighborhoods, voluntary national service programs to allow students to pay for their college education, and tax credits for businesses that make long-term investments.

BIG QUESTION. To win, however, Clinton must put to rest the big question: Does he have the moral fiber to be President? So far, voters are skeptical. Polls show that Reagan Democrats feel betrayed by Bush but aren't ready to embrace the challenger. "Clinton is just a Democratic Dr. Feelgood" says Tsongas supporter David Kellogg, a 50-year-old bowling alley mechanic in Flint, Mich.

That slickness hasn't gone unnoticed by Bush researchers, who are poised to destroy Clinton's claims of progressive politics by trashing his accomplishments in Arkansas. "Nobody knows anything about Bill Clinton's record as governor," worries one top Democratic strategist. "He could really get fried on that."

Clinton may not have lifted Arkansas to the ranks of the most enlightened states. But Bush may have the most explaining to do to voters angry about the economy. That's some comfort to the Clinton forces, who seem convinced that anti-incumbent fever will serve their cause—and have angry mobs bellowing "Anybody but Bush" come November.

By Douglas Harbrecht in Flint, Mich., and Richard S. Dunham in Washington, with Lois Therrien in Chicago and Greg Bowens in Plymouth, Mich.



LIFE AFTER LEE AT CHRYSLER

Eaton's cost-cutting skill will come in handy, but infighting may be fierce

Few new top executives have ever had to hit the ground running quite so fast as Robert J. Eaton must. The career General Motors Corp. executive takes on Chrysler Corp.'s top job just as the No. 3 automaker looks to be making a comeback. But if it fizzles, Eaton, 52, may find himself mired in a snake pit of political infighting.

In winning the right to Chrysler's chairmanship, the affable Eaton bested two of corporate America's more sizable egos—current chairman Lee A. Iacocca and his presumed heir, Chrysler President Robert A. Lutz. Iacocca, 67, had lobbied directors to stay on past his scheduled retirement on Dec. 31, and Lutz, 60, was thought to be a near shoo-in to replace Iacocca when he did leave. Now, Iacocca promises to step aside gracefully at yearend and “not be a force” at Chrysler—though he will stay on as chairman of the board's executive committee. Lutz says he will remain at the company and do his “absolute best” to help Eaton.



THE NEW CEO MUST ADAPT TO A FREEWHEELING CULTURE

But former Chrysler executives are skeptical that either man can keep his promise. Many think that Lutz, a former Marine pilot, will find it hard to swallow his pride as Eaton consolidates power. “The problem will come when [Chrysler's] vice-presidents start giving their allegiance to Bob Eaton,” says one. And tension between Lutz and Eaton—or a deepening of Chrysler's financial problems—could encourage Iacocca to try once again to stay on as CEO. Predicts another former Chrysler executive: “In November, I foresee Lee saying to

the board: ‘They’re eating each other alive. I’m going to have to stay on.’”

Even if no political sniping materializes, Eaton is coming on board at a delicate moment for Chrysler. After 18 months of losses, the company has a raft of new models rolling off the line, including a new Jeep Grand Cherokee sport-utility vehicle and the much ballyhooed line of LH sedans. Thanks to heavy cost-cutting, analysts even expect it to eke out a narrow profit this year,

while larger rivals Ford Motor Co. and GM will probably continue to lose money. Wall Street has bid up Chrysler's shares 80%, to 18, since December (charts).

But plenty of pitfalls could stop Chrysler cold. The company is counting on a solid turnaround in the auto market—which still looks iffy. After ticking up nicely in early February, U.S. car sales in early March fell again. And while Chrysler's trucks and minivans are moving smartly, its aging car lineup is losing market share: In the first two months of 1992, Chrysler's piece of the U.S. auto market dropped two points, to 8.2%. One of Eaton's crucial tasks will be to get the LH line out next fall—and ignite sales of the vehicles—before Chrysler's auto market share falls any lower.

With a little luck, of course, Eaton's timing could be just right. Signs are that the Grand Cherokee may be a strong seller. Dealer Donald W. Warnock says that when the first models hit his East Hanover (N.J.) dealership on Feb. 29, “we had a waiting line for people to drive them.” He adds: “That hasn't happened to me in a long, long time.” The stylish new LH models are also drawing raves from analysts and buff magazines such as *Car & Driver*.

THIRD SHIFT. Moreover, Chrysler's balance sheet is improving. The company ended 1991 with nearly \$3 billion in cash on hand. Since then, Chrysler has added \$862.5 million to its coffers from a private placement. As a result, Standard & Poor's Corp. recently upgraded the automaker's credit-watch status from negative to stable.

Eaton's strong background in cost-cutting also may be just what Chrysler needs right now to keep its momentum going. It's aiming to cut an additional \$750 million out of costs this year, using

KEEPING CHRYSLER IN GEAR: NO SURE BET

INVESTORS ARE HAPPY...



DATA: BRIDGE INFORMATION SYSTEMS INC.

...BUT NEW MODELS...



Among other models set to hit showrooms this spring is the Grand Cherokee, which is aimed at stemming the company's loss of share in the four-wheel-drive market. But a slow start on production will keep a lid on profits for most of the year

...MEAN ROCKY PROFITS



DATA: COMPANY REPORTS, FIRST CALL CORP

techniques such as the ones Eaton emulated at GM Europe. It is also just started to squeeze more production out of plants by running them on a three-shift schedule—a system Eaton successfully installed at GM Europe.

Eaton's experience can help make the transition, he'll play a crucial role in turning Chrysler's profits. When Chrysler's St. Louis minivan plant switches

fully to three shifts later this month, its annual output is expected to increase by 55,000 vans. Considering that Chrysler makes an estimated \$4,000 per minivan, that's a nice pop. Two Ontario plants may also make the switch.

Of course, it's far from certain that Eaton can duplicate his GM successes at Chrysler. Political infighting aside, Chrysler's freewheeling, stripped-down

operating style may be hard to adjust to after the ponderous GM. "His biggest challenge is making that cultural change," says a former Chrysler executive. Still, Eaton proved himself remarkably adaptable when he moved from Detroit to Switzerland to head GM Europe. Tomorrow's question: Can he do as well at Chrysler on the return trip?

By David Woodruff in Detroit

WHY EATON WAS NOT NOTICED

brought efficiency, quality, and a solid outlook to GM Europe

It was Friday the 13th, but it was the start of a lucky weekend for Robert L. Eaton, president of General Motors' European unit. That day, Eaton, 52, drove a gleaming white Astra off the assembly line at GM's plant in Szent-Györgyi, Hungary—the first car produced in that country in half a century. Then, Eaton headed straight to New York, where, within 48 hours, Chrysler Corp.'s board named him successor to Chairman Lee A. Iacocca.

Eaton's sudden departure stunned the staff at GM Europe's tightly knit corporate headquarters near Zurich. An easygoing, well-liked executive, he was known for lunching in his shirtsleeves at the company cafeteria. In the days after his abrupt departure, colleagues refused to criticize Eaton. "Nobody around here was going to brand Bob a traitor, even though he left for a competitor," says a top GM Europe executive.

That's a tribute to his performance as general Motors Corp.'s European chief—a performance that probably earned Eaton Chrysler's top job. In contrast to GM as a whole, Eaton's European operation has made enormous progress in the past four years. Indeed, GM Europe is helping keep its beleaguered parent afloat. Last year, the total company posted a \$4.5 billion loss, mostly because of red ink from its North American auto operations. GM Europe, however, cracked up its fifth straight year of gains in 1991—netting \$1.8 billion, a gain of 7% on sales of \$25.4 billion.

THE RHYME. There are a lot of similarities between today's Chrysler and the Europe that Eaton took over in June, 1989. The unit had fallen on hard times in the late '70s. Things were so bad that German schoolkids derided its German-made Opel, chanting a rhyme that went like this: "Every yokel drives an Opel." But by the time Eaton arrived, the company was already on the mend—as



PUSHING EAST: EVEN BEFORE THE WALL FELL, EATON WAS MOVING INTO POLAND AND HUNGARY

some analysts believe Chrysler is now. The Opel Kadett, introduced in 1984, was selling well, and the unit was showing real profits. It needed a solid detail man to keep the momentum going—and that's just what it got in Eaton. During his tenure, profits grew, and GM Europe's market share rose to 11.7% last year from 10.4% in 1988 (chart).

Eaton doesn't get all the credit for the comeback. Much of the groundwork was laid by his predecessor, John F. Smith, now back at GM's Detroit headquarters. But Eaton has a bent for manufacturing and team-building—two skills Chrysler needs if it's to improve efficiency and quality. Iacocca credits Eaton with boosting GM Europe's auto quality by 50% and making it Europe's lowest-cost producer. "He fits in with the management and team philosophy that we've built here at Chrysler," says Iacocca.

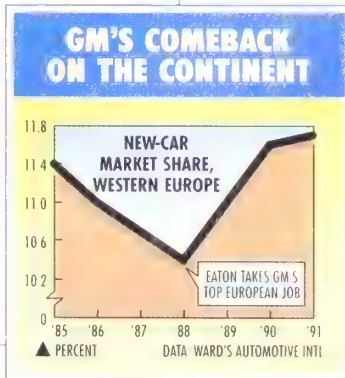
Eaton also has boldness that Chrysler needs to survive against bigger rivals. For instance, even before the Berlin Wall fell in November, 1989, Eaton was engineering a move into Eastern Europe, particularly Hungary and Poland. Once the Wall was breached, he backed a push by GM's

German unit to build a \$650 million Opel plant in Eisenach, eastern Germany. That helped Opel outsell even Volkswagen in the region last year.

Indeed, with the October launch of the Astra, Eaton was just beginning a nervous, take-no-prisoners assault on VW. This sporty midrange model is aimed at overtaking VW's Golf as Europe's top-selling car. So far, so good: GM Europe already has booked 400,000 orders for the Astra and expects to sell 700,000 of them this year. What's more, Eaton was increasing the pressure on VW by expanding GM's European capacity by 25%, to 2 million units by 1995.

Part of Eaton's strength is that he's a car buff. He started tinkering with engines at age nine while growing up in Colorado, and by age 11, he was tuning up a '32 Chevy. Ex-colleagues say he's never happier than when he's out on the road testing a new model. That's why the Astra, developed under Eaton, has plenty of nifty features, from a peppy five-speed transmission to extra protection against side collisions.

To Chrysler, Eaton's talent for cost control may be his best point—particularly since the company's current



No. 2, Robert A. Lutz, is also a car guy. Karl Ludvigsen, chairman of London consultants Ludvigsen Associates Ltd., credits Eaton with "running a tight ship." Largely, that has been a matter of using a quality program, cutting the fat out of production, and outsourcing to keep component costs down.

Eaton also spent heavily on upgrading plants. GM Europe started "investing early in productivity and product," says Bruce Blythe, strategy chief at Ford of Europe Inc., who admits that competitors such as Ford are having to spend more to catch up. And Eaton set a frugal tone. Andre Van Roy, head of GM's Continental operations in Antwerp, Belgium, says Eaton demanded plain-vanilla hotels and meals when he came to visit and once complained, only half-jokingly, that the food was "too good" in a restaurant Van Roy chose.

LABOR COUP. Then there are Eaton's management skills. One of his biggest coups: an innovative deal with Europe's sometimes-fractious auto unions. In 1988, he got GM's Belgian unions to agree to a schedule that keeps GM's Antwerp plant running 20 hours a day. He later negotiated three-shift schedules that keep the company's Zaragoza (Spain) plant and Bochum (Germany) plants going around the clock. Now, says John Lawson, an analyst at London's Nomura Research Institute: "They are a model for the U.S." Chrysler wants to move to such a system at home, and Eaton's experience could smooth the transition.

Not all of Eaton's initiatives turned out so well. In 1989, he negotiated the deal in which GM outbid Italy's Fiat by paying \$600 million for a 50% stake in Swedish luxury carmaker Saab Automobile. Saab's losses quickly mounted when its three key markets—the U.S., Britain, and Sweden—tanked. GM's share of the losses totaled \$1.1 billion in 1990 and 1991. Saab may break even this year thanks to cost-cutting.

Eaton acknowledges that his work at GM Europe wasn't finished. To match Japanese rivals, Eaton says, European producers, including GM, still need to ax "\$1,000 or more per car." Just before taking the Chrysler job, Eaton said of GM Europe: "We need to get double-digit annual productivity gains—and we are still not there in most of our plants."

That may sound like *Mission Impossible*, but Eaton thinks such goals can be achieved by steady improvements. "There's no magic in this," he says. Maybe not. But a dose of what Eaton has been doing at GM Europe may be just what Chrysler needs.

By John Templeman in Zurich, with Patrick Oster in Antwerp and bureau reports

BANKRUPTCIES

THEY'RE ALREADY LINING UP OUTSIDE CONTINENTAL'S GATE

As it nears the end of bankruptcy, the airline looks sweet to suitors

After word leaked that Maxxam Inc. Chairman Charles E. Hurwitz was readying a proposal to buy a chunk of Continental Airlines Inc., one might have expected the airline to murmur hopeful acknowledgment. It's not every day an investor steps forward with a possible \$200 million in equity. But Continental had nothing to say about the offer. No comments either from lawyers for Continental's unsecured creditors, who will own the airline

British Airways PLC is looking. BA has been seeking a U.S. partner, which is one reason it earlier discussed a merger with KLM Royal Dutch Airlines, 20% owner of Northwest Airlines Inc..

SAS is another name dropped frequently. The Swedish carrier paid \$100 million for 16.8% of Continental in 1990. That equity will vanish when Continental reorganizes, but SAS and Continental still have an agreement to feed passengers to each other's flights at Continental's Newark (N.J.) hub. An SAS spokesman says, "We don't see any need to make a further investment"—but some in the industry feel SAS might try to box out European rivals by buying new equity.

SNAGS. And don't rule out Northwest Airlines, which talked with Continental CEO Robert L. Ferguson III last fall about a merger. With \$4.2 billion in long-term debt and a highly unionized labor force that might clash with nonunion Continental, Northwest is hardly an ideal candidate. But its domestic route structure would fit nicely with Continental's, and its Asian routes would be a valuable addition to Continental's growing global presence. Northwest Chairman Alfred A. Checchi remains acquisition-minded, say people close to him.

Any new investor would have to reckon with the Pension Benefit Guaranty Corp. The federal agency wants \$700 million from Continental to fund the pensions of its defunct sister carrier, Eastern Air Lines Inc. The PBGC is trying to hold up Continental's proposed \$290 million sale of its majority stake in Air Micronesia or limit what Continental can do with the proceeds.

Hurwitz isn't talking, but he faces other potential snags. A source close to the creditors says Hurwitz "wants too much for too little." Moreover, his reputation as a raider, acquired while building Maxxam's real estate and timber portfolio, and his friendship with former Continental boss Frank A. Lorenzo may not sit well with the rank and file.

Directors expect Hurwitz to present a formal proposal at Continental's Mar. 31 board meeting. It probably won't be the last bid the board hears. After all, if the economy and airline traffic continue to improve, so will Continental's prospects.

By Andrea Rothman in New York, with bureau reports



HURWITZ AND WIFE BARBARA: HIS REPUTATION AS A RAIDER COULD KILL HIS BID

when it emerges from bankruptcy protection and who would dearly welcome a capital infusion.

Ungrateful? No—just playing it cool. The airline and its creditors are hoping the offer will get other bids flowing, say sources close to both. "There have been a number of parties kicking the tires and looking things over for some time," says one source close to the creditors. A Continental board member adds that Continental has boosted sales and profits strongly in recent months, and that has sparked a "feeding frenzy" of interest. "Now we have to see if someone else steps up to the plate," he says.

Although Los Angeles billionaire Marvin Davis and Fort Worth developer H. Ross Perot Jr. have expressed interest in Continental before, airlines top the list of possible bidders. Industry sources say

“When the earthquake hit, I watched helplessly as my poor LaserJet went crashing to the floor.”



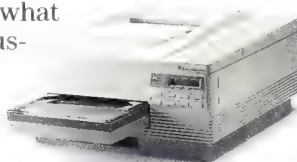
—James Cost, Chief of Police, Campbell, CA

“The LaserJet fell from about four feet,” said Police Chief James Cost, recalling the disastrous San Francisco earthquake. “I assumed we’d have to buy another one. But later, my secretary plugged it in and printed a document. It’s about the only thing that did work that day.”

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laser printers combined. Some people cite innovations like Resolution Enhancement technology, which creates sharper edges and better overall print quality. Or genuine PCL5 printer language. Or the range of options, with five printers priced from \$1,249 to \$5,495.*

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Commentary/by Karen Pennar

THE U.S. SHOULD BE SELFISH—AND HELP RUSSIA

Russian history is replete with the record of despots working their will on a passive population, so it was reasonable for Richard Nixon to raise that specter in making the case for Western assistance to the former Soviet Union. Fear of an apocalyptic outcome may finally jolt Washington out of its lethargy. But there is opportunity here, too. Assisting Russia and the other republics is not only good politics but also good economics—for both givers and receivers.

The International Monetary Fund is expected shortly to approve Russia's membership, an event that should trigger a round of financial commitments. Although the U.S. will not shoulder the burden of these commitments, it should spearhead the process. Experts believe Russia alone will require financial support this year of about \$18 billion, most of which would be in the form of loans, not grants. The U.S. share would likely be 20%, or \$3.6 billion. Those numbers pale in comparison with the Marshall Plan, which extended direct aid of \$13 billion (\$75 billion in today's dollars) from 1948 to 1951 to the war-devastated countries of Western Europe.

'BIG MARKET.' Thus, for a relatively cheap price, America can help others and help itself. First of all, we should spend now in order to save later on. If economic reforms in Russia fail, defense spending will rebound. "You want to make sure the peace dividend is a permanent one," says Andrei Shleifer, economist at Harvard University. "To me, that's 95% of the economic rationale."

Offering assistance should produce savings. But there's reason to believe it would also produce a payoff. Why? First, there's the "big market" theory. In the former Soviet republics today, there are 300 million underserved people in need of consumer products and thousands of undersupplied enterprises in need of materials and capital goods. Getting a foot in that door by extending assistance now—including money that will pay for the most desperately needed imports—is wise.

Then, too, unlikely as it may seem, there's the prospect that with a boost from the West, Russia and some other

republics may one day find themselves growing at an annual clip of 7% or more. "The best-case scenario is that these countries have a chance at becoming little Koreas or Taiwans," says Gary Hufbauer, economist at Georgetown University. Two-way trade between such fast developers and the West would zoom. Here again, getting in on the process early is important.

Hufbauer believes only Ukraine and

Democratic Institutions Project, is "the poorest rich country in the world."

That assessment should give some comfort that the West won't be throwing away money. For the most part, it won't be giving it away, either. Of the \$18 billion, only about \$3.5 billion would be in humanitarian aid. Such aid has sentimental appeal, but should be designed to help the recipient better.

U.S. trade credits pledged thus far, for instance, are mostly financing U.S. agricultural sales. So "our humanitarian-aid policy is really a policy to support American farmers," charges Shafiqul Islam, economist at the Council on Foreign Relations. Experts say medical supplies are more urgently needed.

MYOPIA? The narrow focus on humanitarian needs has diverted attention from the bigger economic picture. Exports plunged last year, foreign exchange reserves are depleted, and Russia can't pay for the imports that industry needs. Production is contracting, while living standards are plummeting. And more price hikes are in store.

Balance-of-payments financing can cushion the blows. Loans from the IMF and the World Bank can help pay for imports. Forgiveness of interest payments can preserve \$2 billion or \$3 billion for social programs and perhaps slow down the printing presses. A \$6 billion fund can help stabilize the ruble.

Those sound like small amounts, and to the West they are. But they could have a huge impact. Economists at PlanEcon Inc. in Washington estimate that output will plunge 20% in Russia this year, to 440 billion rubles. The current exchange rate of 90 rubles to the dollar yields the nonsensical result that Russian gross national product will amount to \$5 billion this year, but even at a rate of, say, 20 rubles to the dollar, the country's GNP would amount to only \$22 billion. Whatever the true size of the economy, it's clear that nearly \$20 billion of assistance should have a powerful effect. Occasionally, the right political move is also the right economic one. This is one such time.



the small Baltic republics of Latvia, Lithuania, and Estonia stand a chance of achieving rapid, Asian-tiger-like growth rates. But, he concedes, 30 years ago, when the U.S. was pumping aid into South Korea, few would have given odds that it would become an economic superstar.

Many factors favor a more optimistic outlook for the former Soviet Union: It has the world's largest oil reserves and ample supplies of other natural resources. It produces one-third of all the world's doctorates in science and engineering. Its work force is well educated and its labor costs extremely low. Russia, says Graham Allison, director of Harvard University's Strengthening



IT'S FOR THE BIRDS. LITERALLY

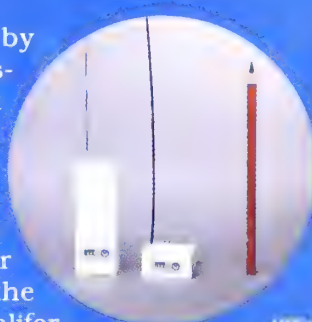
On November 13, 1991, the U.S. Fish and Wildlife Service gave NTT its Corporate Wildlife Stewardship Award for its revolutionary technology that is increasing our knowledge of wildlife and helping rare species.

Snow geese are among the most beautiful of birds. Unhappily, deterioration of the environment along some of their migrating routes has seriously reduced certain populations. To protect these remarkable birds, locating their migratory stopovers is essential. Attaching an active transmitter is the best solution. But, until now, even the smallest transmitters weighed some 150 grams, much too heavy to use on birds.

New technology helps solve a mystery

NTT believes communications technologies are for exchanging information not only between people but also between man and his global environment. That is why NTT actively supported a U.S.-Russian-Canadian project to help save snow geese. NTT's R&D contributed the crucial new technology: an ultra-light satellite transmitter weighing only 55 grams. In summer of 1991, these tiny transmitters were attached to 30 snow geese from Wrangel Island in Siberia to determine their 3,000-mile migratory path to California.

Picked up by satellite, the transmissions made it possible, for the very first time, to precisely locate migratory stopovers. In spring of this year, a similar project to trace the birds' return from California to Siberia is being planned. A mystery of nature is close to being solved.



NTT's
new standard-setting
55 and 20 gram
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An expanding commitment

A world leader in responsible technological innovations, NTT has recently perfected a satellite transmitter weighing only an unbelievable 20 grams! Such barrier-breaking developments are part of NTT's vision of communications technology that will preserve energy resources. The NTT Group is also working towards an NTT Global Environmental Charter, a further commitment to expanding possibilities on our planet Earth and preserving its irreplaceable treasures.



NTT's President Masashi Kojima receives Corporate Wildlife Stewardship Award from US&WS Director John F. Turner.

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SUPPORT TO COMMUNITY AND ENVIRONMENT
CORPORATION



BOB BRENNAN HAS A LOT RIDING ON THIS TOSS OF THE DICE

With fraud allegations still unresolved, he may try to take over Bally

When Robert E. Brennan rolls the dice at Atlantic City's casinos, he doesn't bet small. Donald Trump's Taj Mahal is still smarting from the \$800,000 he collected in two recent visits to the craps tables. Says the former penny-stock mogul of his betting: "I have on occasion enjoyed it, and on occasion I've enjoyed it a lot."

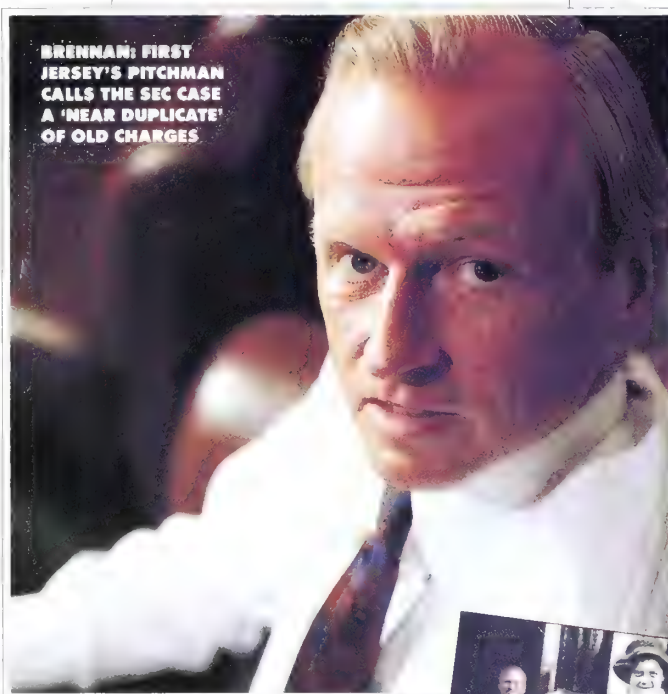
Now, Brennan is making one of the bigger bets of his career. Nearly six years after quitting the retail end of the stock business amid still-unresolved allegations of fraud at First Jersey Securities Inc., his brokerage firm, Brennan on Mar. 18 told regulators at the New Jersey Casino Control Commission that he wants a casino owner's license. For a modest \$16.5 million or so, he has amassed a 7% stake in Bally Manufacturing Corp., parent of two Atlantic City casinos and other leisure operations. He says he may boost his holdings.

The move makes trouble for all concerned: Bally, the casino commission—and Brennan himself. For Brennan, the biggest headache is that his license application rekindles interest in a suit filed in 1985 by the Securities & Exchange Commission. In the action, which finally may go to trial this year, the SEC alleges that First Jersey, by dominating the market for its low-priced underwritings, gouged customers with illegally high markups of as much as 124% during the early 1980s.

THORNY QUESTIONS. Brennan, whose First Jersey ads, starring himself, were once a fixture on late-night TV and the financial pages, doesn't think much of the SEC's case. He calls it a "near duplicate" of old charges, but these securities-fraud claims are different enough that a judge refused to dismiss the action. Brennan says the SEC is pursuing the suit "out of animus" and plays it down as "a civil lawsuit like any other."

Indeed, aside from the fraud claims, many of the charges are familiar. In 1987, Brennan settled for \$10 million a class action filed by investors who al-

leged similar abuses. But the SEC is different in one respect. In addition to seeking at least \$9.8 million in allegedly illegal profits, the agency wants a court-appointed examiner to probe First Jersey's records for evidence of wrongdoing. "It's potentially a lawsuit of much greater proportions" than the class action, says SEC assistant chief litigation counsel Mark Kreitman.



BRENNAN: FIRST JERSEY'S PITCHMAN CALLS THE SEC CASE A 'NEAR DUPLICATE' OF OLD CHARGES

Brennan's application raises other questions for the casino commission. After all, Brennan has never been convicted of a crime. Years of tussles with regulators have produced a string of civil fines and settlements—for him and First Jersey—but that's all. What's more, he already has a license to do nongaming business with the casinos through his Garden State Park horse track in southern New Jersey, which plans to simulcast races at the gaming halls. One longtime casino lawyer gives Brennan a 70% shot of winning a license, as long as he can hold off the SEC.

Bally thinks his odds are much lower,

but it's taking no chances. Although Brennan holds three times as many Bally shares as Chairman Arthur M. Goldberg, he hasn't been invited to serve on the company's board. "He's an investor," says Goldberg. "We have a lot of investors." If Brennan does try to oust management, Bally says its investigators will fight back with a dossier on his past scrapes with regulators.

SMUDGED NAME. Still, Bally is vulnerable. While profitable, it has one Nevada casino in Chapter 11 and is in a dispute with the Internal Revenue Service. Brennan insists he doesn't want to depose Goldberg, but he admits he's "disappointed" that Goldberg has been selling his shares. He adds that he wants to "be helpful" to all shareholders.

Above all, Brennan is intent on winning the gaming license. More than getting him into the improving Atlantic City market, the license would cap years of efforts to clear his smudged name. And a healthy casino operation would spin off a lot of money.

That could come in handy for Brennan. He declines to estimate his net worth, but even while one of his stallions earns \$100,000 stud fees at one of his three Due Process Inc. stables, his International Thoroughbred Breeders Inc. has lost \$45 million over the past five years. ITB made money last year only by selling one of its two tracks. The horse-breeding and racing businesses, he admits, are "in a tailspin." But he claims his

construction operations are profitable, even though their markets in New Jersey's Monmouth County are overbuilt. And he predicts that the red ink is over at another outfit, CCC Franchising Corp., whose interests include medical-management services and a company that makes electronic-monitoring bracelets for homebound prisoners.

Despite the close scrutiny, the competitive

Brennan isn't likely to cave in on the casino bid. Now 48, he boasts that in 1989 he ran the New York City Marathon in a respectable 3 hours, 31 minutes. And as Trump knows, he loves to beat casinos at their own games.

By Joseph Weber in Philadelphia





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MOUSE FEVER IS ABOUT TO STRIKE EUROPE

Euro Disneyland, opening Apr. 12, may draw 11 million tourists a year

And you thought Europe's big happening of 1992 was the creation of a borderless market. The event that really counts is coming on Apr. 12. That's when Europe will join the U.S. and Japan as a truly advanced consumer society: It's opening day for Euro Disneyland.

Located in a former beet field 20 miles east of Paris, the venture is Walt Disney Co.'s splashiest new theme park to date, a \$4 billion gamble. When a studio tour opens in three years, the complex will cover an area equal to 20% of the city of Paris. Paris itself, Disney executives claim, will henceforth be merely a "side trip" for foreign tourists, who'll pour in from all over Europe to ride the teacups and shake hands with Mickey, Donald, Goofy, et al.

If it can overcome nagging early troubles, Disney may be right—to the chagrin of Europeans who see the venture as the final Yankee nail in Europe's cultural coffin. "Disney is both crass and seductive," wrote Britain's *The Guardian* newspaper last month. "We hate it, but we also want to go there."

PUBLIC BRAWL. The latter sentiment, at least, is music to Mickey's ears. Like IBM, General Motors, and a host of other U.S. companies, Disney is counting on a unified Europe to make up for slow growth back home. One promising sign: Over the past 15 months, a million curious Europeans have paid \$1.75 to view a model of the park—double the expected number.

The Paris Bourse, too, has caught mouse fever. Shares of Euro Disneyland—49% owned by Disney, 51% by the public—have soared to 29 from their 1989 offering price of 12½. And in February, Euro Disneyland replaced mineral-water giant Source Perrier as one of the 40 stocks making up the French equivalent of the Dow Jones industrial average. Not bad for a company that hasn't started operating.

The company expects 11 million Europeans to visit the park yearly, vs. 13 million at California's Disneyland. Some analysts think that estimate is too low. Disney quickly could cart off serious cash: \$100 million in operating earnings next year, predicts analyst Jeffrey B. Logsdon of Seidler Amdec Securities Inc. In 1995, when its fee for managing the European park doubles to 6%, Disney's operating income from it could hit \$275 million, says Logsdon. Last year, Disney earned \$636.6 million on revenues of \$6.2 billion.

Yet Mickey could get his ears pinned back in Europe. The park is opening as much of the Old World is sunk in recession. And

apartments. It's also offering Parisians \$285 a month for spare rooms. Meanwhile, gendarmes have been chasing Disney squatters from farmland and have fined villagers for triple-renting rooms in eight-hour shifts. "Housing will be a problem for two years," predicts Michel Colombé, the mayor of a nearby village.

HEAPS OF HYPE. Then, there's the risk of violence. In 1989, French political protesters pelted Disney Chairman Michael

D. Eisner with eggs. And when a Paris theme park opened five years ago, carnival operators worried about new competition exploded a bomb, injuring 10 people.

Through it all, Disney is wearing a happy Mouseketeer mug and heaping on the hype. *Snow White and the Seven Dwarfs* is playing at French cinemas, and Disney programming floods European TV. A half-scale model of the park's central feature, Sleeping Beauty's Castle, is touring European capi-

WHAT PRICE MICKEY?

	Euro Disneyland	Disney World
PEAK-SEASON HOTEL RATES*		
HIGHEST	\$345	\$455
LOWEST	\$97	\$104
CAMPGROUND SPACE		
	\$48	\$30-\$49
ONE-DAY PASS		
CHILDREN	\$26	\$26
ADULTS	\$40	\$33

*For a four-person room

DATA: WALT DISNEY COS.

Disney programs are flooding European TV, and a model of Sleeping Beauty's Castle is touring the Continent's capitals

Disney has rubbed many people the wrong way—from employees who dislike the company's strict dress code to 16 French contractors who claim the company owes them \$150 million for construction changes. That claim erupted into a bitter public brawl in January, threatening the park's completion. An arbitrator now has been named.

Insiders say Disney can't find enough cooks, waiters, and chambermaids for its six hotels. One apparent reason: Housing is critically short for the 12,000 park employees arriving from around Europe. Government-promised housing is inadequate, so Disney is rushing to build

tals, along with Mickey, Minnie, and Goofy. Four Disney Stores have opened in London, with a dozen more planned elsewhere in Europe. A \$6 million newspaper insert, funded partly by corporate partners including Mattel, Coca-Cola, and American Express, will appear in seven major cities.

How can Europe resist? Chances are it won't. Cultural imperialism or not, millions of Europeans will soon be careening down Big Thunder Mountain, celebrating the Old World's coming of age.

By Stewart Toy in Paris, with Ronald Grover in Los Angeles and Mark Maremont in London



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Sheraton Manhattan Hotel, New York City • Sheraton New York Hotel and Towers • Sheraton Park Avenue Hotel, New York City

BY DEIDRE A. DEPKE

TURBULENT AIR FARES

Worried about the effect on international travel, U.S. airlines recently scrapped plans to raise leisure fares by 2%. Meanwhile, in the past year business fares rose some 20%, while excursion tickets fell 1%. Here's how fares changed for flights from several major U.S. cities

Per indexed fare*	Business	Discount
From:		
NEW YORK/NEWARK	24%	-9%
LA	58	-11
S	32	-1
ANGELES	0	-6

*SELECTED POPULAR DESTINATIONS
SOURCE: MAR. 91-MAR. '92

*AMERICAN EXPRESS AIRFARE MANAGEMENT

CF, AN ENZYME THAT CURES CYSTIC FIBROSIS

Scientists at the National Heart, Lung & Blood Institute think they may have a genetic new treatment for cystic fibrosis, the deadly lung ailment. A naturally occurring enzyme in the body called DNase can help break down the thick, sticky mucus that builds in CF patients' lungs, the NHLBI scientists say. In preliminary studies, the partly cleared patient's lungs with a gene-spliced, natural form of this enzyme. by biotech star Genentech. Such a treatment would give big help until scientists can cure the disease with gene therapy (page 78). On Mar. 23, Genentech—which is controlled by Roche Holding—signed a deal with subsidiary F. Hoffmann-Lauda to develop and promote the drug in Europe.

SELLING SOFT DRINKS TO BUY A BANK

Bank privatization south of the border is a Mexican-only affair. But to raise the money to buy their banks, Mexican

companies are selling off other interests—to foreigners. The latest example is Visa, the food and beverage group. It bought Mexico's No. 2 bank, Bancomer, for an astounding \$2.6 billion last November, thanks in part to a \$1 billion bridge loan from J.P. Morgan. Now, to pay back the debt, Visa on Mar. 18 announced the sale of its soft-drink business, Aguas Minerales, to Britain's Cadbury-Schweppes for \$350 million. Visa, which brews popular beers such as Dos Equis, Tecate, and Bohemia, is also shopping a big chunk of its beer business north of the border, some say to Anheuser-Busch and Coors.

STEVE JOBS WILL SHARE THE JOB

► Steve Jobs is betting history won't repeat itself. On Mar. 23, Jobs will begin sharing power at computer maker NeXT with Peter van Cuylenburg, an executive with Cable & Wireless, a London-based international phone company. Cuylenburg, 43, will become NeXT's chief operating officer. Jobs remains chairman.

The news is a surprise, since Jobs has kept tight management control at NeXT. After all, in 1985 Jobs was tossed out of Apple Computer by the CEO he'd hired—John Sculley. Jobs says that won't happen again. "No. 1, Peter is not another John Sculley," says Jobs, 37. "No. 2, I own

SWEET SIX FIGURES AND NEVER BEEN KISSED

What's the point of cornering the market if there's no one in the corner to cuddle with? That's what American Singles figures, anyway. So, on Apr. 5, the nonprofit San Rafael (Calif.) organization will hold a dating conference for single professionals. The agenda includes advice on prenuptial agreements and guarding against gold diggers, plus the stories of corporate heavy hitters who also excel in love. The meeting is the brainchild of onetime Catholic grammar-school teacher Rich Gosse, who claims to be America's leading singles expert. Gosse, who's charging \$25 for the seminar, says fixing up professionals is a big challenge, since they don't put as much effort into affairs of the heart as they do careers. That's why his keynote address will rebuke workaholics for spending too much time at the office, forgoing relationships for work, and finding it "unprofessional to date someone you meet through work."



50% of the company this time." Jobs says he needs help because NeXT is on its way to becoming the "next billion-dollar computer company." The six-year-old, privately held NeXT had 1991 sales of \$128 million.

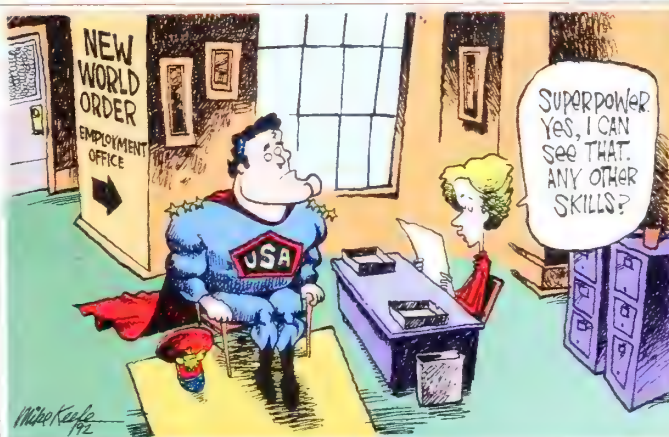
FEDEX MAKES ITS RETREAT IN EUROPE

► Federal Express finally is conceding it can't crack Europe. The company on Mar. 16 said that it will take a \$254 million third-quarter write-off to restructure its money-losing European operations. Federal plans to fire 6,600 employees and limit deliveries to 16 European cities. Federal

packages destined for other locations will be delivered under joint agreements with rivals Securicor Omega Express and TNT Express. Federal, meanwhile, is expected to sign a \$250 million, 10-year pact with Laura Ashley that has it taking control of the Britain-based retailer's logistics and distribution. Laura Ashley has been plagued with delivery problems. It also wants to pump up mail-order sales with 48-hour delivery.

HAS A TRULY GLOBAL BANK EMERGED?

► Given the disappointments of other multinational lenders, can a global bank work? Executives at Hongkong & Shanghai Banking and Britain's Midland Bank hope so. After more than four years of courtship, the two banks at last have agreed to merge. Details haven't been announced, but analysts believe Hongkong Bank will exchange at least \$4.7 billion in shares to buy Midland. The combined group would have \$250 billion in assets, strength in Asia and Britain, and a sizable presence in North America, where Hongkong & Shanghai owns Marine Midland Banks.



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CANDIDATE BUSH STILL HAS SOME FOREIGN POLICY CARDS TO PLAY

Ever since his disastrous trade mission to Japan in January, George Bush has avoided foreign policy like the flu. But now, a confluence of urgent diplomatic issues is bringing foreign policy back onto the agenda—and giving the president a new, but risky, opportunity to turn his international expertise to political advantage.

The hottest issues involve trade. When German Chancellor Helmut Kohl visits Bush on Mar. 21, he is expected to propose a compromise to end the stalemate in the multilateral trade talks of Uruguay Round. Some German officials say that after months of effort, Kohl has won French support for reductions in European subsidies to grain farmers in exchange for a U.S. increase on exports of gluten and other nongrain animal feeds. This could pave the way for the broader deal to end agricultural subsidies that the Administration has long favored.

Negotiations over a U.S.-Canada-Mexico free-trade pact are kicking into high gear. Bush will try personally to iron out differences in a late March conference call with Mexican President Carlos Salinas de Gortari and Canadian Prime Minister Brian Mulroney. The Administration hopes to send a draft trade agreement to Congress this spring. Bush will argue the deal will create U.S. jobs in the long run, but Democratic protectionists will try to bury the initiative.

Bush may also flex his military muscles. Some senior U.S. officials hint that an American-led air strike on Iraq may be used to eliminate remaining missile and nuclear-weapons capabilities. Meanwhile, former President Richard M. Nixon's plea for more help for the former Soviet Union has heightened interest in expanding U.S. aid.

None of this comes at an opportune time for Bush. "America's best hope" GOP challenger Patrick J. Buchanan, who had savaged Bush for ignoring domestic issues, is all but out of the race. The likely Democratic nominee Bill Clinton has avoided inflammatory rhetoric on trade and foreign policy, where he has experience. "The voters will remember that this is a president who has managed some of the most momentous international events since 1945 in the first three years of his administration," says one Republican strategist.

But foreign policy offers pitfalls, too. Even a successful strike on Iraq could backfire if the public thinks Bush acted to court voters. Bush, says Stephen Hess of the Brookings Institution, "would have to be very careful that it's not perceived as pulling his political chestnuts out of the fire."

Still deeply worried about the state of the U.S. economy, voters may not be ready for a fresh glimpse of the foreign policy President. "There's no cheering section in Levittown" for foreign policy, says GOP analyst Kevin Phillips. That's exactly why the moves of George Bush back onto the world stage are likely to be cautious indeed.

By Amy Borrus, with Igor Reichlin in Bonn

HEALTH CARE? WHO CARES?

What ever happened to health care reform? The issue that many political experts thought would dominate debate in this year's Presidential campaign has dropped from sight. But the reasons for health care's sudden obscurity suggest that the issue will be back this fall.

The problem, experts suggest, is that while public support for reform remains high, voters are confused by all the proposals ranging from a government-run national health system to President Bush's relatively modest plan. "The issue is still at the point where all anyone has to do to win a favorable vote is to be for reform," says Dallas Salisbury, president of the nonpartisan Employee Benefit Research Institute. "It has not reached the point where voters can differentiate among the candidates' specific proposals."

That will change, however, when the line is drawn clearly between the Democrats' call for a greater government role in ensuring affordable health care and Bush's insistence on market-based reform. Politically, the Democrats seem to have the edge—and in a close race, it could prove crucial.

By Susan B. Garland

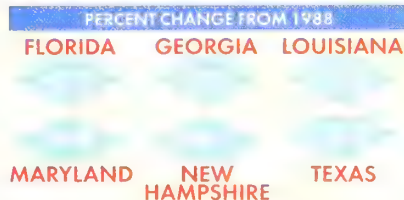
ITAL WRAPUP

CIVIL RIGHTS

One of the few provisions that made the 1991 Civil Rights Act palatable to business might be scrapped. The compromise measure limited the damages available to victims of sexual discrimination to \$50,000. Now, congressional Democrats are making good on their promises to womens' groups to kill that cap. The Senate Labor & Human Resources Committee has approved a bill that allows unlimited damages, and the full Senate is expected to follow suit soon. Business will try to stop the bill in the House. But it may take an election-year veto to keep the lid on damages.

WHERE HAVE ALL THE VOTERS GONE?

Not, in 1992, to the polls. Of 11 primaries through Super Tuesday, participation was off in eight—particularly among Democrats and Southerners. A sampling:



If the trend continues, expect candidates to skew policy toward those who do vote—relatively affluent Americans

DATA: AP, ABC NEWS

SWEATSHOPS

The government may go after clothing manufacturers for the sins of their subcontractors, Labor Dept. sources say. Federal law prohibits the interstate sale of goods produced in violation of child-labor and wage-hour laws. The regulators believe many subcontractors that cut and sew apparel for brand-name manufacturers are flagrant violators of the rules, and Labor is sending letters to apparel makers advising them that they may be held liable. Sanctions include seizures of the goods. In 1991, the Customs Service targeted the industry for import-rule violations by subcontractors.



Philip W. Tate



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THE PAUL VOLCKER OF JAPAN

Bank of Japan's Yasushi Mieno is giving inflation no quarter

For much of his life, Bank of Japan Governor Yasushi Mieno has been fascinated by sumo, Japan's ancient sport of wrestling. As a struggling student at the University of Tokyo in the lean years after World War II, Mieno lived in a wrestlers' lodge run by the father of a friend. Over the ensuing four decades, he rose to become one of sumo's leading movers and shakers, recently joining the prestigious council that picks champions. But while you would never take the 68-year-old Mieno for anything but a ringside observer, a good measure of his revered wrestlers' legendary determination appears to have rubbed off on him.

Mieno is quickly gaining a reputation as the Paul Volcker of Japan. Although the Tokyo stock market is taking gas as Japan undergoes its worst slowdown in nearly two decades, Mieno is standing firm against his greatest fear: inflation. While he has reduced the discount rate by 1.5 percentage points, to 4.5%, since last summer, he has ignored calls to slash rates another point to rev up stock- and growth charts.

'RISK OF OVERKILL.' Many still expect him to do that at any time. But other than hinting that he feels Japan already may be experiencing a soft landing, Mieno is conceding nothing. "There is very little chance of a quick slowdown in the economy," he insisted to reporters on Mar. 12. Only four days later, the Nikkei Stock Average broke through 20,000 to close at its lowest level in five years.

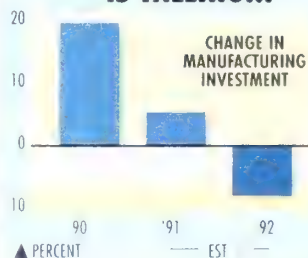
In fact, Bank of Japan data indicate that the adjustment process isn't as smooth as Mieno suggests. Capital



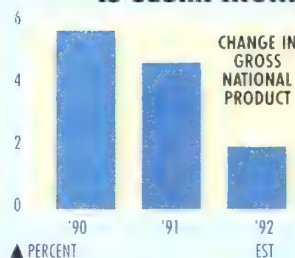
RATES ARE HIGH, AND CONSUMERS AREN'T SPENDING

JAPAN'S ECONOMIC QUANDARY

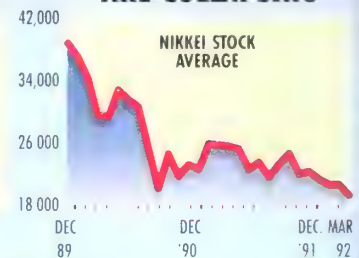
CAPITAL SPENDING IS FALLING...



...THE ECONOMY IS SLUMPING...



...AND STOCKS ARE COLLAPSING



DATA: BANK OF JAPAN, DRI/McGRAW-HILL, BRIDGE INFORMATION SYSTEMS INC., DEUTSCHE BANK

spending is plummeting, profits are flagging, and consumer spending is waning. Even inflation is down to less than 2%, the lowest in three years. Holding firm on interest rates, analysts say, could put pressure on Prime Minister Kiichi Miyazawa to spend more aggressively than he intends. But what if the government doesn't take up all the slack? If rates stay high, says Keikichi Honda, president of Bank of Tokyo Ltd.'s re-

search arm, "there is a risk of overkill."

Although Mieno prides himself on his independence, political concerns are weighing heavily on the BOJ. The ruling Liberal Democrats, weakened by years of financial scandals, face electoral losses this summer if Mieno keeps the economy in check. Doing so could also isolate Japan. With manufacturers pumping up exports to overcome slow spending at home, Japan's month-

e surplus doubled
record \$10.2 bil-
in February. More
the same would
e trade tensions
Washington and
r allies. "There is
n in Japan for an
ng of monetary
y," says Assistant
asury Secretary
L. Wethington.
at would improve
prospect for
yth."

apan's elite is also
ng potshots at
no. With the Nikkei's slide sending
ers through the country's banks, the
s of the Japan Chamber of Com-
ce and the Keidanren, the country's
ing industrial association, are de-
ding sharp rate cuts. And LDP god-
er Shin Kanemaru, who is said to
that Mieno's stand will make it dif-
t for the party to raise campaign
ds, has even urged Miyazawa to fire
bank chief. "If the Prime Minister
like cutting [Mieno's] neck," he sug-
ed, rates would fall faster.

We listen to these voices very care-
y," Mieno responded. But in reality,
a calls have only stiffened the bank-
resolve—and boosted his popularity
a consumers weary of real estate
es continually spiraling beyond
e. With unemployment at a mere
few households are feeling much
. The major victims of Mieno's cam-
n so far have been the bankers, bro-
s, and property and stock speculators
thrived in the easy-money 1980s.
eral top bankers and brokers, their
stitutions rocked by hot-money scan-
, already have been forced from of-
fice. And residential land prices have ac-
tually begun to retreat. Mieno's war on
ncial speculation has even led one
minist to dub the bank governor Oni-
a after a popular TV character who,
in Hood-style, protects the weak.

BLE BASHER. Mieno's stubborn resis-
tance to calls for action comes as no
surprise to BOJ-watchers. Within months
succeeding Satoshi Sumita in 1989,
new central bank chief took off
against the inflationary threat looming
the country's surging "bubble econo-
my." Shocking the Ministry of Finance
by earning the enmity of powerful
stockbrokers, he hiked the discount rate
in 1990, sending the market into a tailspin.
Coming up with quick fixes is a Mieno
trademark. A 45-year career officer whose
posts played a key role in assembling
emergency financing for Yamaichi Secu-
rities Co. after it nearly collapsed during
the market crash in 1965, and in 1986 he
averted a crippling bank failure by help-



Mieno: GOOD AT THE QUICK FIX

ing Sumitomo Bank
Ltd. take over the
troubled Heiwa Sogo
Bank.

Mieno's adaptability
to changing situations
comes naturally. The
son of a railway execu-
tive in Japanese-oc-
cupied Manchuria,
Mieno grew up fre-
quently switching
schools and friends as
his father was trans-
ferred from job to job.
After his family lost
everything during the

war, Mieno quickly learned how to cope
on the fly. At Tokyo University, he ped-
dled soap, clothing, and other black-mar-
ket goods to support his parents and his
younger brother and sister, who both
suffered from tuberculosis.

Mieno remains fast on his feet. Ac-

cording to one senior Federal Reserve
official, the bank governor began a
crash course in English soon after tak-
ing office. He continues to take daily
lessons and is now fairly comfortable
speaking English in informal settings.

Whether Mieno will grow comfortable
with the idea of lower interest rates is
another question. "We don't want a
plunge or panic," a BOJ aide suggests.
But while the market waits for Mieno to
make up his mind, stock trading has
ebbed to a trickle. And even if Mieno
moves rates lower, don't expect him to
restart the money pump with 1980s-style
abandon. Mieno, says the Fed official,
"is very serious about inflation, and he
hasn't flinched." Like the wrestlers he
has followed for years, Japan's No. 1 in-
flation hawk is likely to hold his ground
stubbornly for some time to come.

*By Ted Holden in Tokyo, with Mike
McNamee in Washington and William
Glasgall in New York*

JAPAN

PSST! WANNA BUY INTO JAPAN INC.?

It has lots of great companies. Alas, those aren't the ones for sale

As T. Boone Pickens discovered,
Japan is a tough place to attempt
an unfriendly takeover. After a
two-year fight, the Texas corporate raid-
er last summer gave up on his effort to
use a 26.4% stake to win four board
seats at Koito Manufacturing Co., an
auto-parts supplier 19%-owned by
Toyota Motor Corp. Koito claims Pick-
ens was attempting greenmail, while he
claims he was frozen out by Japanese
corporate collusion.

But the Japan that has
rejected most for-
eign takeover bids,
even friendly ones, is
changing its ways. Al-
though still in small
ways, foreign com-
panies are suddenly
finding it easier to
buy into Japanese
companies. Until re-
cently, even for a pure-
ly domestic deal, the Jap-
anese referred to the sell-
side of a merger-and-acquisi-
tion transaction as *miuri*, a term that
once described destitute farmers selling
their daughters into prostitution. But at-
titudes are changing. Foreigners made
13 acquisitions worth \$1.4 billion in Ja-
pan last year, according to Daiwa Secu-
rities Co. Some bankers expect the total
to double or triple in 1992.

With the economy in the dumps, Japa-
nese companies are getting squeezed. So
far, rather than the corporate heavy-
weights, it's mostly small, family-owned
outfits that are looking for outside help.
"It has come to the point where econom-
ics prevails over Japanese sentiments,"
says Kazumichi Shimamoto, an M&A
manager at Daiwa. One banker says
only 10% of her clients would accept a
foreign partner. Still, two years ago,
no one would. "At least now
they're willing to talk about
it," she says.

TECH FOR TAT. A lot
of the activity involves
drug and chemical
companies, says Ki-
yotaka Fujii, direc-
tor of M&A at CS
First Boston (Japan)
Ltd. Small companies
that can't keep up
with the enormous
R&D expenses by them-
selves get access to state-
of-the-art products, while the
foreign companies can expand in grow-
ing markets. In one deal last month,
Pfizer Inc. purchased Koshin Medical, an
Osaka medical equipment distributor for
about \$23 million.

There are payoffs in other industries,
too. Last month, Electronic Data Sys-
tems, a unit of General Motors Corp.,



bought 19.9% of Japan Systems Corp. for \$28.9 million, with an option to buy up to 51% over three years. Japan Systems is losing money, and many of its 600 software engineers sit idle. The deal gives EDS Japan Ltd. access to scarce engineering talent while Japan Systems wards off creditors and gets access to the latest in computing.

Even some bigger companies are now ready to do spin-offs. Lion Corp., a household products company with annu-

al sales of \$2.3 billion, recently sold its 74.5% share of a money-losing insecticide subsidiary to S.C. Johnson Co.'s Japanese subsidiary. And Saudi Arabia's state-owned oil company, Saudi Aramco, is negotiating to buy stakes in refineries owned by Nippon Oil Co. and others.

HELPING HAND? Officials are trying to encourage more deals. The Ministry of International Trade & Industry is asking the parliament to approve preferential tax treatment, accelerated depreciation,

and other goodies for companies with at least one-third foreign ownership.

The trick is to find a perfect mate. Ikuo Yasuda, a deputy general manager at Long-Term Credit Bank of Japan Ltd., says Westerners look for a majority stake in a healthy company, whereas the Japanese want to retain control and wouldn't be selling unless they were in trouble. Nevertheless, for foreign companies, he says, "it's buy time."

By Karen Lowry Miller in Tokyo

SOUTH AFRICA



NO TURNING BACK: WHITES WILL BE SHARING AN UNCERTAIN FUTURE WITH BLACKS

'WE HAVE CLOSED THE BOOK ON APARTHEID'

Now, the country has to turn its attention to the disastrous economy

A young white man stood outside the polling place in central Johannesburg on Mar. 17, agonizing over the choice that faced him. A no vote would mean the security—even if temporary—of a return to apartheid. A yes vote would mean sharing an uncertain future with his black compatriots. But it would also let his beloved national cricket team continue its recent comeback to international competition.

In the end, he and nearly 2 million of South Africa's white voters took the plunge and chose to reject their apartheid past. It was a landslide vote for continued talks with black leaders on a new constitution. The more than two-to-one majority in the referendum handed President F.W. de Klerk an enormous victory, surpassing the expectations of even the most optimistic analysts. "Today, we have closed the book on apartheid," De Klerk declared.

African National Congress President Nelson Mandela agreed that, in principle, the vote signaled the end of white privilege. But apartheid is far from dead, he warned. To truly end the racial system, there would have to be "enough houses, more medical facilities, and better pensions for blacks," he added. South Africa is a long way from this, says Mandela, especially because "I still cannot vote in my own country."

GREEN LIGHT. But the vote was a clear sign that whites are now prepared to address such problems, not the least of which has been South Africa's prolonged economic stagnation. Unemployment has been sky-high, at 19%, and no new jobs have been created for the past decade. Inflation is 16%, and growth has remained below 2% for 10 years. International sanctions, particularly those hitting loans and trade financing, helped strangle new investment since 1985. And

even when all international sanctions are lifted, an export-led recovery in the midst of worldwide recession isn't likely. To make matters worse, the entire southern African region is suffering from severe drought.

With a green light for political reform, however, foreign investment could begin to trickle back. Cities and states in the U.S. that outlawed trade and investment could begin to lift bans. Overall, business leaders seem relieved with the vote. While they still worry about future economic policies—the ANC's pro-nationalization stance, in particular—most welcome reform. "This was the only road open to them," says Colin Hope, chairman of T&N PLC, a big British auto-part maker with a sizable presence in South Africa. "It provides a good basis for foreign investment."

MORE VIOLENCE? Now that most opposition to a new constitution has been brushed aside, the next steps are fairly clear. The myriad parties to negotiations, including De Klerk's National Party, the ANC, and other groups, will return to the table at the Convention for a Democratic South Africa. Meanwhile, a temporary government to replace the whites-only one could be established in a matter of months. It will prepare for the election of a constituent assembly, perhaps as soon as yearend.

As the first election to include the country's 24 million blacks, it would require careful managing, including control over security forces and access to state-run radio and TV. Once elected, the constituent assembly would negotiate in detail the country's new constitution. Elections based on the new document could be held by late 1993.

While the right has lost by the ballot, violence is still a danger. Members of neo-Nazi paramilitary groups vowed to take up arms in the event of a yes vote. And fighting between the ANC and Chief Mangosuthu Buthelezi's Inkatha Freedom Party continues. But come what may, there's no turning back now. South African whites voted unequivocally to join with blacks at long last.

By Alan Fine in Johannesburg, with Mark Maremont in London

GERMANY'S ECONOMIC FUTURE ON THE BARGAINING TABLE

After nearly a decade of labor peace, relations between German employers and the powerful trade unions have suddenly soured. As Germany's economy flags under a \$100 billion cost of absorbing the East, unions are demanding fat wage hikes—around 10%. Bank workers have been on strike since Feb. 21. Three million public employees threaten to strike unless the government boosts its 3.5% offer to them. These actions have triggered a raging debate over whether Germany can still afford its generous treatment of workers. Europe's unity drive forces Germany to drop its protective barriers, the country's sky-high wages, shrinking workweek, generous vacations, and inflexible work conditions are looming as a big handicap. The social contract that has played a strong role in German success could unravel under these competitive pressures. Chancellor Helmut Kohl recently weighed in, urging Germans to take shorter vacations and retire later. For 40 years, labor's cozy relationship with the employers' associations, which negotiate for manufacturers, has produced cushy deals for workers. German companies kept ahead with big investments in equipment, but as markets become increasingly global, they have less and less room to maneuver. For instance, the openness of eastern Europe offers rivals a chance to undercut German producers by paying wages a fraction of Germany's average \$13.75 per hour. "Germany will have to change its wage policy," says Heinz Greiffenberger, owner and CEO of a car drive manufacturer, who wants to replace his German suppliers with low-cost Czechs.

DEEP DITCH. Far from flexible, the union leadership is hunkered down. "This is no normal wage round, but a struggle about Germany's social-political future," says Klaus Zwickel, deputy chairman of the metalworkers' union, IG Metall. IG Metall Chief Franz Steinkühler blames management for fail-

ing to prepare for increased competition, and he insists the cure must not be lower wages for his members. Last year, IG Metall rocked industry with a 6.7% increase for its 4 million workers.

A further round of sharp pay hikes—6% or more—could choke off investment and delay recovery. And if wage settlements outpace inflation this year, the Bundesbank is sure to keep interest rates high, a move that could kill an economic rebound throughout Europe.

But even if they win big boosts in this round, labor will have to bend soon, especially on rigid working conditions. As companies

such as Mercedes-Benz and BMW start to discuss openly their plans to move production abroad, workers' councils are defying union leaders—to hang on to their jobs. BMW employees agreed to Saturday shifts—a union taboo—in exchange for a four-day workweek. BMW says the change has boosted productivity by 7% to 8%. IBM workers supported management's fight for 24-hour, 7-day shifts at its semiconductor plant in Zindelfingen.

The midsize companies—or *Mittelstand*—that are the backbone of the economy are beginning to rebel against

the generous settlements handed out by the employers' associations, which are dominated by the giants. For instance, Germany's Association of Entrepreneurs wants its 7,000 members to bail out of employers' associations if they reach unrealistic settlements. "If you negotiate your own contract, you tend to get a more reasonable result," says Volker Geers, the association's chairman.

Even IG Metall is considering offering more flexible arrangements for dividing up the workweek. But the unions will likely have to make much bigger concessions—or watch their jobs migrate to eastern Europe.

By Gail E. Schares in Frankfurt



GERMAN LABOR MAY LOSE TO LOW-COST RIVALS

GLOBAL WRAPUP

EUROPE

The huge budget boosts requested by European Commission President Jacques Delors over the next five years are drawing heavy fire. Delors says the increases, from \$79 billion for 1992 to \$106 billion for 1997, are needed to implement the political and economic union agreed upon at the Maastricht summit last December. But critics say he is using Maastricht to get money for pet projects. In particular, some think Delors' plan to lavish \$5 billion a year on research and development subsidies is a sop to the pro-industrial-policy French. In addition, the financially strapped Germans are

squirming over the \$12 billion price tag for infrastructure aid over five years to poorer EC nations, such as Spain and Portugal.

CUBA

The U.S. General Accounting Office (GAO) is fretting about the safety of two Soviet-designed nuclear reactors in Cuba. The two 440-megawatt units, now under construction near the port city of Cienfuegos—just 250 miles south of Miami—are due to come on line in 1995 and 1997 respectively.

The reactors are not of the very unsafe Chernobyl type. But the GAO says they lack adequate safety features. What's more, spare parts are scarce in

the troubled Commonwealth of Independent States.

ISRAEL

Israel is aiming to reduce its purchase of American components for arms, Israeli defense officials say. Israel, which has been stung by allegations of illegal transfers to China and South Africa, currently imports tens of millions of dollars of U.S. components for weapons systems. This gives the U.S. the right to veto arms sales. Israelis charge that the U.S. uses this power to stifle competition from Israel, which earned \$1.6 billion from arms exports in 1991. Israeli officials hope France will fill the gap.

CALPERS IS READY TO ROAR, BUT WILL CEOs LISTEN?

The powerful pension fund is preparing to raise a ruckus about unresponsive companies

Early last fall, the California Public Employees' Retirement System—undisputed tiger of America's activist shareholders—suddenly said it was changing its stripes.

Instead of confronting corporations with proxy resolutions at this spring's annual meetings, the \$68 billion pension fund had decided to try a "kinder, gentler" approach: It was quietly calling on executives at 12 companies to discuss their poor performance, excessive pay, or board problems, just as some chief executives had recommended.

Well, forget the pussycat. The tiger is back. And its reappearance forbodes yet another beastly proxy season. CalPERS' Chief Executive Dale M. Hanson has so little to show from his new tactics that he's ready to escalate his campaign. For a start, he's going public with the 12 names, which he revealed to BUSINESS WEEK (table). CalPERS plans to vote against the board of directors at three of them—Dial, Control Data, and Polaroid. Discussions are scheduled or under way, but with little hope for swift change, at three: Time Warner, USAir, and Hercules. They may see "nay" board votes—or proxy resolutions next year. American Express, Salomon, IBM, and Chrysler seem to be mulling over Hanson's concerns. Only two—ITT Corp. and Ryder System Inc.—have settled with CalPERS.

"'Kinder, gentler' is not working," Hanson says. "It has shown us that a number of companies won't move unless

they have to deal with [the problem] because it's in the public eye." From now on, expect CalPERS to pressure its targets more forcefully—using publicity, proxy resolutions, negative votes, whatever it takes.

STRAIGHT ON. CalPERS' reincarnation is likely to mean more trouble for corporations with restive investors. Other activists are also starting to present their concerns directly to managers and directors, a tactic that such corporate leaders as General Mills Inc. Chairman H. Brewster Atwater Jr., head of the Business Roundtable's corporate governance task force, say they favor. And, like CalPERS, they are moving away from broadly protesting bad governance practices and are instead singling out poor performers for attention. Many CEOs thought the funds were misguided in their choice of focus: Why, they asked, pester a good performer about its board's independence?

CalPERS took those sentiments to heart when it devised its new offensive last summer. It reviewed its holdings, searching for companies whose performance landed them in the bottom half of the Standard & Poor's 500-stock index. CalPERS also sought outside help. It bought company profiles from Washington's Investor Responsibility Research Center. It asked compensation expert Graef S. Crystal for his thoughts. And it hired Gordon Group Inc., a Cambridge (Mass.) consultant, to select and study a few dozen companies. Gordon produced

reports analyzing each company's strategy, problems, and total return to shareholders, annually and over five years, in comparison to its peers and the market. Then, Hanson, CalPERS General Counsel Richard H. Koppes, and the fund's investment staff chose their marks.

By mid-November, the 12 were hit with "Dear CEO" letters, copies to members of the board. In them, CalPERS concentrated on three issues—board composition and practices, CEO pay, and formation of a shareholder advisory committee. Proposing an advisory panel is really a device to question a flawed strategy or lackluster record, should discussions fail and prompt a return to the shareholder-resolution process.

The missives met with various fates. At American Express Co., CEO James D. Robinson III got his, but the mailroom didn't recognize the names of the other 19 directors—even though they included Henry Kissinger and former RJR Nabisco Inc. chief F. Ross Johnson. The letters were returned to their Sacramento sender.

Responses differed, too. Dial Corp. declined any meeting. Polaroid Corp. and Control Data Corp. stalled, CalPERS says. The others slowly agreed to come to the table—though Time Warner Inc., where a key issue is the board's strength, won't set a meeting until its ailing co-CEO, Steven J. Ross, can attend.

When the CEOs did agree to meet, some were probably surprised by what

CALPERS' TARGETS

► **RETURN** Total return to shareholders, 1987-91. Comparable return for the Standard & Poor's 500: 15.2%.

	AMERICAN EXPRESS	CHRYSLER	CONTROL DATA	DIAL	HERCULES	IBM
RETURN	-15.3%	-38.8%	-58.8%	84.8%*	27.0%	-9.2%
KEY ISSUES	Executive pay, strategy	Executive pay	Strategy	Executive pay	Board independence and procedures	Executive
STAKE	\$83.3	\$48.6	\$15.1	\$16.7	\$38.4	\$324.7
STATUS	In discussion	In discussion	No discussions set, vote against board likely	Management declined to meet, vote against board likely	Fruitless discussions; proxy resolution likely in 1993	Meeting scheduled late March

*RETURN WAS +1.2% FOR FIVE YEARS ENDING DECEMBER, 1990
A RESTRUCTURING IN OCTOBER, 1991, RAISED STOCK PRICE ABOUT 35%

got. Ever since
ic pension funds be-
getting active in
mid-'80s, executives
e complained about
r naivete. Some
e doubted their mo-
tion, suspecting that
son, for one, had
ical ambitions and
ted publicity. But
er General Counsel
es M. Herron says
son and Koppes
ew as much about
er as we did." ITT
Rand V. Araskog
:"They don't try to
you what to do.
y give you their
ghts."

FUL. Hanson and
pes also bring along
r research reports,
a governance and
tegy recommenda-
s. When they met
inson in early
ch, for example,
queried him about
effectiveness of the

pany's large board, the closeness of
ral directors to Robinson, and their
erous pay and perks. The reports
suggested that American Express
sider spinning off its investment
k, Shearson Lehman Brothers Inc.,
ause it consumes enormous re-
ces but contributes little profit. And
complained that the company's pay
em was too complex and too discre-
ary. American Express says the
s were "quite constructive."

Salomon Inc. got a similar earful.
PERS wants the company to put more
iders on its board and split the job
hairman and CEO, an idea its current
Warren E. Buffett brought up last
Salomon declined comment.

Chrysler Corp., Hanson quibbled
CEO Lee A. Iacocca's pay and the
pany's strategy since 1987, when—



HANSON:
"KINDER,
GENTLER' IS NOT
WORKING"

Too many CEOs, though, are used to doing things as they please, without much accountability. Many don't like to hear opinions contrary to their own and fear intrusive shareholders. In fact, in its dealings so far, CalPERS has turned initial entrée into ongoing relationships with its targets. Hanson will meet with Herron and Ryder CEO M. Anthony Burns, for example, again this spring—agenda undetermined.

STRONG WEAPON. That may be the real value of shareholder activism: It exposes CEOs to differing views. As Texaco Inc. CEO James W. Kinneer, who had to talk with many institutions during Texaco's 1987 bankruptcy and 1988 proxy fight with Carl C. Icahn, notes: "Now,

having met them, I'm in favor of talking with them. I feel communication is very valuable." The knowledge that someone is monitoring their moves also acts as a check on CEO performance.

In any case, shareholders have a powerful weapon in their proxy votes, which have rarely been used to express displeasure with general policy. Says General Mills' Atwater: "When they get no response, they should use their votes. I don't know who wouldn't be stimulated beyond belief if 20% of the votes [for directors] were withheld."

CalPERS, perhaps joined by other investors, will test that tactic this spring. And, eyeing the future, the fund is boosting its clout—narrowing the holdings in its portfolio while increasing its stakes. This cat isn't slinking away.

By Judith H. Dobrzynski in New York

ex was 103.9%

► **STAKE** Value on Mar. 16, 1992, in millions of dollars

	POLAROID	RYDER	SALOMON	TIME WARNER	USAIR
	-12.4%	-31.0%	-9.8%	31.7%	-66.2%
pay, composition	Strategy	Board composition and procedures	Board composition	Board composition	Strategy
	\$15.6	\$10.5	\$28.7	\$93.2	\$9.7
hed to pay plan and practice	No discussions, vote against board likely	Pact reached to make board more independent	In discussion	No high-level discussions yet scheduled	Meeting scheduled for April

DATA: CALPERS, GORDON GROUP INC., BW

GEICO'S ACCELERATION IS NO ACCIDENT

The insurer has flourished by carefully choosing good drivers

Way back in the mid-1970s, when gems such as the Pinto and the Gremlin graced American driveways, Geico Corp. seemed ready for the repo man. The auto insurer had expanded beyond its decades-old franchise of covering only government workers and had taken on more reckless civilians. But after flirting with bankruptcy, Geico wisely refocused on safe drivers and pulled off one of the insurance industry's most remarkable turnarounds. Investor Warren E. Buffett, along for the ride, saw the value of his 48% stake soar from \$45.7 million to a current \$1.58 billion.

Now, while other property-and-casualty insurers are reeling, Geico is leaving its rivals in the dust. Selling directly to customers, rather than using agents, it offers among the lowest prices in the industry—a highly appealing advantage in tough economic times. Stringent loss management and tight cost control continue to pay off handsomely. Its return on equity has averaged 25% over the past three years, some 10 percentage points better than the industry. The market has certainly noticed. Geico's stock has zoomed about 40% in the last year, to around 230. Its shares have become so pricey (chart) that in late February, the Chevy Chase (Md.) insurer announced a 5-for-1 split. It also upped its quarterly dividend by 31%, to 75¢.

SAFETY FIRST. Next, the company wants to expand on its success in autos by pushing deeper into homeowners' insurance, which accounts for only 6% of its \$2.14 billion in revenues. Geico has also launched an auto club to compete against the likes of the American Automobile Assn. But most profit growth surely will come from its core car policies.

Geico's secret is as simple as it is effective: Be incredibly picky about the people it insures, coddle safe drivers with low prices and good service, and maintain one of the lowest cost structures in the business. Avoid-



CEO SNYDER: "WE CAN BE FAIRLY UNFORGIVING"

ing the 15% commissions charged by agencies, Geico can underprice such competitors as State Farm, Allstate, and ITT-Hartford by 10% to 15%. Instead, it sells its policies via direct mail and radio.

Such direct underwriting, as it's known, accounts for just 10% of the U.S. car insurance market. But the low-cost sales method holds promise: With premium hikes far outpacing inflation in the past decade, consumers are shopping for cheaper insurance without an agent. "More and more people feel they can enjoy the lower price if they just learn about the business a bit," says M. Mike

Gates, vice-president for personal lines for rival ITT-Hartford Insurance Group.

Among drivers, Geico has a well-earned reputation for being finicky. The company will quickly bump up rates or cancel policies for even slightly troublesome clients. "If you have a couple of accidents

that are your fault, we'll start to look at you very closely," says Chief Executive William B. Snyder, 62. "We can be fairly unforgiving."

Pickiness keeps Geico the No. 7 U.S. auto insurer. "They're just not growing in terms of customer base," says Edward B. Rust Jr., CEO of industry leader State Farm. But Snyder is happy to trade size for profits. Last year, when most insurers took it on the chin, Geico's

net earnings, less onetime tax gains, grew 6%, to \$193.8 million.

NO JUNK. Much of the credit for Geico's turbocharged performance goes to Snyder, a Travelers Insurance Co. veteran who signed on in 1977 and helped launch a program to save the company. Called Operation Bootstrap, its central tenet was avoiding risky clients. That conservative philosophy extended to its investments as well. Today, Geico's \$3.2 billion portfolio made up mostly of blue-chip stocks and top-drawer bonds, is free of junk debt

and risky real estate holdings.

Yet even the most cautious strategy couldn't insulate Geico from all the turmoil in the \$60 billion property-and-casualty market. States such as California, Pennsylvania, and New Jersey have imposed rate freezes and dictated lower profit returns. Under California's Proposition 103, Geico is supposed to refund policyholders \$56 million in "excessive" premiums. "Sheer nonsense," says Snyder, who is fighting the ruling in court.

In the meantime, he has been busily buying back Geico shares. Last year, he spent \$100 million on 700,000 shares, and the board has authorized the purchase of 900,000 more. The campaign has edged up Buffett's position, and he'll likely gain majority control this year. Is management worried? "He doesn't exercise any control over the company," insists Snyder. Even if he did, Snyder shouldn't fret. The way things have been going at some other Buffett investments, such as Salomon Brothers Inc. and the Washington Post Co., he should be in no hurry to shift gears at Geico.

By Brian Bremner in Chevy Chase, Md., with David Greising in Chicago

FAST-LANE STOCK





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STRIKING GOLD IN THE CALIFORNIA SKIES

Southwest's steady expansion has the majors mighty nervous

Executives at Southwest Airlines have a pet phrase to describe the carrier's strategy: Southwest doesn't slap the "big cats," says Donald G. Valentine, vice-president for marketing. "We just run between their legs." By stressing short flights, second-tier airports, and no-frills service, the Dallas carrier has avoided head-on competition with the giants—and built the best profit record in the industry.

Southwest's through-the-legs philosophy hasn't changed. But lately, the scrappy carrier has been making rivals yowl—particularly in California. Southwest began a push into that state two years ago and is already the second-largest player after United, with 23% of intrastate traffic (chart). Some of the megacarriers were already struggling in the less-than-Golden State. By pushing down fares by 60% on some routes, Southwest "is keeping the pain up," says Jeffrey G. Katz, in charge of passenger sales at American Airlines Inc.'s western division.

BIG BUG. The problem is, the giants will find it increasingly tough to walk away from the heat. In the past, they mostly surrendered the short-haul niche to Southwest, which gets its 30%-plus cost advantage partly from higher productivity. But as the pesky airline pushes into such major population centers as California and Chicago, American, for one, is rethinking its plan. Philip Baggeley of Standard & Poor's Corp. calls Southwest a "500-pound cockroach, too big to stamp out."

The huge California market is particularly well suited to Southwest. Some 8 million passengers each year fly between the five airports in the Los Angeles Basin and three in the San Francisco Bay area, making it the busiest corridor in the country. It also had become one of the pricier. Con-

sumers formerly enjoyed the low fares of AirCal and Pacific Southwest Airlines. But in the late '80s, the two were swallowed by American and USAir Inc. In time, fares began edging up. "There was a yearning for the resurrection of PSA," says Southwest CEO Herbert D. Kelleher.

Enter Southwest, whose low fares and frequent flights persuaded many car-happy Californians to fly instead. The market expansion has been dramatic. On the state's Oakland-to-Ontario route, for instance, total air traffic soared 123% in the quarter Southwest started service, says Andrew P. Nocella, an aviation ana-

lyst at Avmark Inc. And Southwest has dragged down fares. At first, the Ontario-Oakland route fell from an average of \$102 to \$61 and is now about \$40.

Competitors are taking it on the chin. American, which dumped its unprofitable L.A.-to-San Francisco shuttle in early 1991, says it's dropping nearly \$8 million yearly at its San Jose hub. USAir, too, is losing money in California, though it cut service dramatically in the region last year. And now market-leader United has quit flying the San Diego-Sacramento and Ontario-Oakland routes, where Southwest has rapidly built service. Analysts figure United, which has a major hub in San Francisco, is in the red in California. It declined to comment. **COPYCAT.** Still, the big carriers can't give up on California. This critical market feeds traffic into the rest of their systems, especially more lucrative transcontinental and trans-Pacific routes. And they must serve the corridor to keep frequent fliers happy.

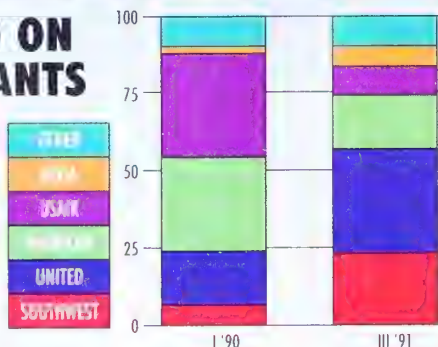
American, often the bellwether of in-

**KELLEHER: THE
BEST PROFIT
RECORD IN THE
INDUSTRY**



TAKING ON THE GIANTS

California is the busiest air corridor in the country. A market-share breakdown:



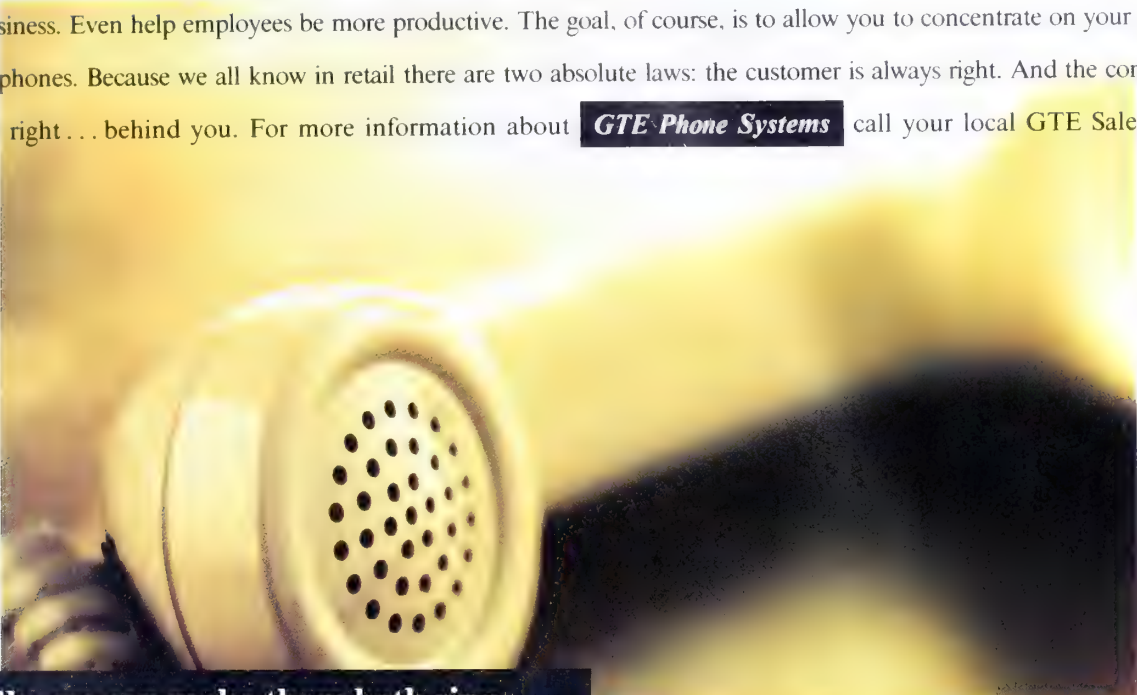
FIGURES DON'T INCLUDE COMMUTER AFFILIATES
DATA: SOUTHWEST AIRLINES, BASED ON TRANSPORTATION DEPT. PASSENGER BOARDING REPORTS, BW

dustry change, is taking the threat seriously enough to consider creating its own no-frills, Southwest-style shuttle at its San Jose hub. "We must learn how to compete with those that offer different products at different prices," says CEO Robert L. Crandall. But analysts are skeptical, noting that a bare bones shuttle could tarnish the image of American's long haul business.

An economic rebound may delay the day of reckoning. When the giants are earning millions again, "a lot of the focus on Southwest will probably be dissipated," says Kelleher. Wishful thinking? Maybe. But even if he's right, it won't be long before tenacious Southwest pops up on their radar screens again.

By Wendy Zellner in Dallas with Eric Schine in Los Angeles

OK. Let's get down to business.[™] Technology is amazing, isn't it? Imagine, phones that can ring up sales. Well in truth, phones do play an integral part. But it's people, GTE people, who really make it work. First, we begin by looking closely at how your business works. Then, we evaluate your needs. For example, are you linked to your warehouse across town? Can customers always reach you? And heaven forbid, are you losing calls? Next we recommend solutions. Ones that can help increase new and repeat business. Even help employees be more productive. The goal, of course, is to allow you to concentrate on your business, not your phones. Because we all know in retail there are two absolute laws: the customer is always right. And the competition is always right... behind you. For more information about **GTE Phone Systems** call your local GTE Sales Office.



Actually, we can make them both ring.



GTE

THE POWER IS ON

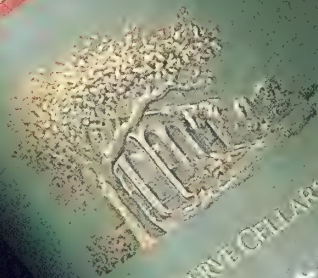
It's time for a change to Gallo.

Bring out the delicate flavors of this salmon mousseline with our California Chardonnay. Its fresh, inviting taste is a natural with today's cuisine.





THE VINEYARDS OF
ERNEST & JULIO GALLO



RESERVE CELLARS

Ernest & Julio Gallo

RESERVE

Chardonnay

OF CALIFORNIA

VINED & BOTTLED BY ERNEST & JULIO GALLO, MO

EXECUTIVE PAY

COMPENSATION AT THE TOP IS OUT OF CONTROL. HERE'S HOW TO REFORM IT

Our incomes are like our shoes; if too small, they gall and pinch us; but if too large, they cause us to stumble and to trip.

—Charles C. Colton, English clergyman, 1822

One by one, some of Corporate America's most lucratively paid executives have been making the pilgrimage to the spartan offices of United Shareholders Assn. In recent months, the parade has included ITT Corp. Chairman Rand V. Araskog and UAL Corp. Chairman Stephen M. Wolf. The uneasy topic: how much money each is paid.

After the executives' visits to the Washington-based shareholder-advocacy group, both of their companies announced changes in their pay practices. At ITT, executive stock options cannot be exercised for 10 years unless the company's stock rises by 40%. At UAL, executives agreed to improve the disclosure of pay policies to shareholders.

SHRILL CHORUS. The episodes underline the current tension over the issue of executive pay. Throughout the 1980s, a hefty runup in compensation for chief executives sent many swaggering off to the bank. The CEO of a large American corporation now earns about \$2 million a year—a sum that has more than tripled in the past decade, while the pay of factory workers has failed to keep pace with inflation. As

American companies lose ground to foreign rivals, whose chiefs are often paid pittance by U.S. standards, the debate over executive pay is reaching fever pitch. Now, CEOs are on the defensive, stumbling about in those too-big shoes—and maybe headed for a fall.

Even some of the country's most

prominent executives have joined the critical chorus. "The American public is tired of seeing executives make many, many millions of dollars a year when the stock price goes down, the dividends are cut, and the book value is reduced," says Stanley C. Gault, chairman of Goodyear Tire & Rubber Co. Too often, he adds,

pay isn't linked to how well the company's owners do, and "the only one who gets the short end of the stick is the shareholder."

Not every corporate leader sees it that way. For some, the furor over executive pay is media-fueled, populist hooey. They argue that a free market for wages appropriately rewards productivity and talent, to the ultimate benefit of the economy and the nation. "The prize goes to the person who sees the future the quickest," says William P. Stiritz, chairman of Ralston Purina Co., who earned \$13.8 million in salary, bonus, and stock awards last year.

LOW CEILING. Of course, there's merit in both positions. The prospect of justly rich rewards remains the greatest incentive to innovation, risk-taking, and hard work. But the executive-pay derby has become, in some cases, an excessive free-for-all, divorced from the reality of corporate results. What the boss gets paid has ceased to be an issue of economics and has become instead one of leadership, competitiveness, and fairness. The swelling chorus of public and political outrage makes it increasingly



STRIVE FOR SIMPLICITY 1. Return to the basics. Pay the boss a salary, bonus, and stock options. Throw every other pay gimmick out, from performance shares to stock-appreciation rights. 2. Limit perks, golden parachutes, and million-dollar pensions. 3. Fire every consultant who tells you to do otherwise. 4. Don't fudge by repricing stock options if your company's shares fall below their exercise price

ely that Corporate America will feel the ob-
 sive hand of govern-
 nt if it doesn't clean
 its act on its own.
 What to do? The right
 wer won't be the easy
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ike all other con-
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—David Ricardo, 1817

Ricardo is still right:
 ecutive pay doesn't re-
 re a legislated fix. Re-
 m needs to begin in
 the boardroom. Even
 ator Carl Levin, the
 ral Michigan Democrat who instigat-
 Senate hearings on pay, agrees to
 t. "I don't support the government
 ting CEO pay in the tax code," he
 s. "Government should not be mak-
 decisions as to what the right levels
 pay should be."

THE ANTE. The traditional regulator
 mains the best one: the board of direc-
 ts. But now more than ever, directors
 o serve on the compensation commit-
 must begin to assert a higher degree
 independence. Lawyers, investment
 kers, and consultants who draw fees



PAY FOR PERFORMANCE—FOR REAL **1.** Limit the boss's base salary to \$1 million a year, even for the largest compa-
 nies. Every cent beyond that cap should be paid only when
 the CEO meets tough performance targets. Set financial goals
 against an industry peer group. **2.** Give boards discretion to
 reward improvement in such key areas as quality, customer
 satisfaction, and management development. **3.** Charge
 stock options against earnings, because they do have a val-
 ue. **4.** Price large option grants at a premium, so sharehold-
 ers benefit before executives **5.** Encourage stock ownership
 among executives

from the company should not sit on the
 committee that sets the CEO's pay. Nei-
 ther should such committees be com-
 posed entirely of other chief executives,
 who might be chummily open to upping
 the ante. Indeed, some critics suggest
 that no CEOs should sit on a compensa-
 tion committee at all.

Now, pay consultants are typically
 hired by the CEO. But when reviewing a
 new pay plan for top executives, the
 compensation committee should routine-
 ly be able to hire its own outside consul-
 tant for an independent second opinion.

to bonus payouts, or offer nonrecourse
 loans to executives to buy stock. Mostly,
 what they do is further complicate a pro-
 cess that is too complicated to begin
 with, and make it all the harder for
 shareholders to figure out who's really
 getting paid what. "I'm frustrated by
 layers of compensation programs that
 are difficult to understand," says Donald
 S. Perkins, the former chairman of Jew-
 el Cos. and a director on seven compen-
 sation committees. "What we ought to
 be preaching in corporate halls is sim-
 plicity. As soon as a program doesn't

At a minimum, the chief
 executive should excuse
 himself from the room so
 his hired adviser and the
 directors can speak more
 freely on the boss's
 pay—still a rarity in the
 boardroom.

Besides changing the
 process by which pay
 plans are considered,
 boards should change the
 principles that govern the
 process. Compensation
 levels should be based
 not on what other compa-
 nies do, but on what a
 management team ac-
 complishes. For years,
 compensation surveys
 have served only to
 ratchet up pay: If each
 company seeks to pay its
 own executives in the top
 quartile of the industry,
 compensation is perpetu-
 ally forced upward. In-
 stead, if a company's per-
 formance is average for a
 given group, pay should
 be only average. Then,
 eliminate the bewildering
 array of safety nets and
 giveaways that puts cash
 and stock into the hands
 of top executives regard-
 less of how their compa-
 nies perform (table,
 page 55). Stock-apprecia-
 tion rights, performance
 shares and units, and re-
 stricted stock—except
 when used in lieu of
 cash—should be relegat-
 ed to the scrap heap.

MISSING LINK. In chop-
 ping these giveaways, di-
 rectors should aim for
 simplicity. The intensity
 of today's debate over
 pay has opened the gates
 to a drove of hungry con-
 sultants peddling novel
 and quirky ideas—ways
 to index stock options,
 link corporate cash flow

work, we need not invent a new one."

Simplicity does not necessarily mean low pay. But it should mean understandable pay and compensation justified by a job well done. For decades, the clamor has been for pay for performance, an often-empty slogan for legions of consultants selling the latest newfangled plan. The missing link—between pay and the corporation's performance—has mystified investors, employees, academics, and politicians.

That means directors should not reward executives for short-term runups in stock price or earnings per share but for the long-term intangibles that create competitive advantage. "That can be anything from becoming the leader in electronics to staying alive in the steel industry," notes Freidheim. True, it can be hard to measure objectively how well an executive has improved comparative quality, enhanced a company's reputation, developed its management depth,

results, they were becoming less competitive because they were losing ground in quality, customer satisfaction and productivity. Such notions still remain largely absent from the pay-for-performance debate.

Nothing has contributed more to the disjunction between pay and performance than the stock option. When it came into vogue after Congress granted it favorable tax treatment in 1950, few could imagine the impact stock options would eventually have on the compensation game. In the early days, stock-option awards were fairly conservative even miserly. But since the late 1960s the average size of an option grant has tripled, as boards began doling out stock options like Monopoly money. In 1989 Walt Disney Co.'s Michael D. Eisner was handed a then-unprecedented 2 million options—a record broken a year later when Anthony J. F. O'Reilly, chairman of H. J. Heinz Co., received a 4 million grant in one fell swoop. And earlier option grants have made O'Reilly the winner of this year's pay derby so far, with a new one-year record of \$75.1 million in pay, bonus, and stock options (page 58).

The sad truth is that accounting rules make options as free as those tinted dollars in the Parker Brothers game. It's funny money. Everyone agrees that a stock option has real value, yet companies are not required to charge them against earnings. Because option awards are essentially free, they're "never measured, never managed," says Raymond C. Lauver, a former member of the Financial Accounting Standards Board (FASB).

SHARP UPSWING. The grants grew beyond the imaginations of directors, many of whom were as surprised or shocked as the public to see what value they eventually had. "This stock-market escalation has meant that some of these numbers aren't what we all meant them to be," says Donald P. Jacobs, dean of Northwestern's J. L. Kellogg Graduate School of Management and a director on several compensation committees.

What that means is that much of the vast rewards reaped by chief executives has been a product not of their performance but of the general upswing in the market or inflation. American Telephone & Telegraph Co. partly acknowledged this problem in adopting a new stock-option plan, under which most options are priced at a premium of between 20% and 50%. In the case of Chief Executive Robert E. Allen, for example, one of every four of his options bears a price of \$58.03, 50% more than the \$38.69 value of the stock at the time of grant.

The upshot: AT&T shares must rise by more than 50% before a quarter of Al-



INCREASE BOARD SCRUTINY 1. Add non-CEOs to the compensation committee. Exclude investment bankers, lawyers, and consultants who draw fees from the company. 2. Hire an outside consultant to provide directors with a third-party opinion on the CEO's package. 3. Pay directors in stock to forge better links with the company's shareholders

What's badly needed is clarity. Compensation should be composed of a salary, a bonus, and a single stock-option plan that encourages ownership. Consider the example of paying a base salary of \$600,000 with a cash bonus of equal amount. Half the bonus would be contingent on meeting stringent standards of financial performance. The compensation committee would hand out the rest not for so-called pay for performance, but for what Cyrus F. Freidheim, vice-chairman of Booz Allen & Hamilton Inc., calls "pay for competitiveness."

or boosted its productivity. But it's vital to do so—and vital to try to link executive pay to such yardsticks.

Detroit's Big Three are an object lesson in the distinction between pay for earnings or stock performance and pay for competitiveness. During the apparent prosperity of the 1980s, auto makers racked up years of record earnings, while their CEOs raked in ever-more-lucrative pay packages. But much of the profit was the result of voluntary import restraints set by the Japanese. In fact, even as U.S. carmakers posted record

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ach. When the Accounting Principles
ard took a look at it in 1972, it was
pped again for much the same rea-
s. "It was obvious then that the op-
was a valuable privilege," says Da-
Norr, a board member at the time.
e right to issue stock is a license to
at money. It is compensation, and it
uld be measured." When the succeed-
FASB, heavily lobbied by business in-
ests, took the issue up again in 1984,
went nowhere and was again put aside
ee years later. Yet each time the is-
sue was raised, FASB board members
ed unanimously that options result in
expense that should be recognized in
company's financial statements.
reating options as an expense would
e a noticeable impact on some corpo-



IMPROVE DISCLOSURE **1.** Report pay, bonus, and option gains in a single, easy-to-read table. **2.** Include data for three years to allow investors to make comparisons. **3.** When a new option plan is adopted, include an "impact statement" detailing the potential value of the plan to the top officers if the stock annually appreciates by 5%, 10%, or 20% over the 10-year period of the grant

stock ownership, not options, that forge the connection. As Warren E. Buffett once observed, the executive does not lose any money on an option when the stock price plummets, because he is not required to invest. Or as the well-known pay critic Graef S. Crystal puts it: "While the shareholders' boat is parting the waves and going down to Davy Jones's locker, the CEO is sitting on the QE2 in a plush deck chair."

To build a better link with shareholders, directors must formally or informally encourage executives to hold on to their stock for a defined period of time. There are some signs of change taking place here. So far, one company in 10 boasts that it has specific stock-owner-

ship objectives for executives, and one in four restricts or discourages its executives from selling the stock. At a few companies, according to a recent survey, a stock sale by an executive will affect the number of future stock options he or she receives and might even be regarded as corporate disloyalty.

SMOKE AND FOG. Finally, companies must improve the disclosure of their pay plans. A good deal of the skepticism over pay results from the public's inability to understand it. Many companies have contributed to the problem by making the proxy statement an exercise in obfuscation. "The growth in long-term compensation was largely because it was far less disclosed and certainly far less understandable," says Jerry K.

rate earnings in this day of megagrants. Hay Group Inc., a consulting firm, uses the example of a company with 100 million shares outstanding, a \$40 share price, and \$200 million in pretax profit. If the company grants a typical 1% of its shares a year as options, the charge to earnings would be 5% of reported profits. That sort of penalty would almost certainly curtail the abuses that have become too prominent. If some companies with broad-based option plans believe they are still important for morale and motivation of the work force, they'll continue to pay for them.

All the rhetoric claiming that stock options are important in forging a link between the chief executive and the shareholders is just that: rhetoric. It is

ship objectives for executives, and one in four restricts or discourages its executives from selling the stock. At a few companies, according to a recent survey, a stock sale by an executive will affect the number of future stock options he or she receives and might even be regarded as corporate disloyalty.

SALARY AND BONUS The average pay and bonus for the chief executive of a major U.S. corporation is more than \$1.2 million

STOCK OPTIONS With other long-term incentives, these rights to buy a fixed number of shares at a fixed price bring the average CEO's pay to about \$2 million a year

RESTRICTED STOCK Full ownership of these stock grants is restricted based on certain time periods or performance goals

A GUIDE TO THE GOODIES

STOCK-APPRECIATION RIGHTS These permit an executive to take out the gain in a stock option without making any investment

PERFORMANCE SHARES Executives get a grant of free shares if the company hits certain performance targets

PERFORMANCE UNITS Rather than stock, cash awards based on 'units' of stock are doled out to executives if the company meets its performance goals

PERSONAL FINANCIAL CONSULTING Many companies now foot the bill for the CEO's own financial consultant. H.J. Heinz, for example, paid CEO Anthony O'Reilly \$471,350 for financial advice from 1987 to 1990

GOLDEN PARACHUTE If they lose their jobs, most big-company CEOs now get at least three times their annual pay and bonus as a final goodbye payment, as well as immediate access to most of their stock options.

DATA BW

Pay and Performance at Westinghouse Electric Corp.

Some companies have already taken a leadership position. Citicorp, for example, now reports on pay, bonus, and stock-option payoffs in a single, easy-to-read table in its proxy. Another table includes pay totals for each of the past three years, so investors can figure out on their own whether the top executives received increases or cuts in pay.

When a company installs a new stock plan, it should include a short "impact statement" similar to the one that is used to estimate the benefits. The

table would detail the potential value of a stock-option grant under three different scenarios, given annual rises in the stock of 5%, 10%, and 20%. If Heinz had made such calculations public in giving O'Reilly a 4 million-share option grant, investors would know that he stands to gain roughly \$75 million at 5%, \$190 million at 10%, and \$620 million at 20%—over the 10-year period of the option. Put another way, O'Reilly stands to reap \$75 million of reward if the stock price rises by less than the return on a Treasury bill. That's a strong argument for

People of privilege will always risk their complete destruction rather than surrender any material part of their advantage.

—John Kenneth Galbraith, 1977

The debate over pay has moved out of the boardroom and squarely into the political arena—a fact reinforced by the concerns over compensation raised from such disparate quarters as both Democratic front-runner Bill Clinton and Vice President Dan Quayle. "If you can have that much unanimity from that wide a range on the political spectrum, that prob-

IS THE TOP BRASS OVERPAID?



PAY CRITIC GRAEF S. CRYSTAL His detractors dub him the darling of the corporation-bashers. The former pay consultant and business-school professor has done more than anyone else to heighten sensitivity over executive pay in the boardrooms of Corporate America. Even so, he's skeptical about recent disclosures by several companies, including Westinghouse Electric Corp., that they've cut CEOs' pay. "To appease the public," he says, "they're cutting the cash and then coming through the back door with a big option package. It's not a cut. It's a huge increase, in drag."

To increase accountability, Crystal believes no chief executives should sit on compensation committees of other companies' boards. "One way for a CEO to assure he's paid at the maximum is to pack his compensation committee with other CEOs."

What those committees might explore are two approaches to pay: One alternative, says Crystal, is to pay plenty, but only when the chief executive delivers big rewards to his shareholders. The other is to adopt the Japanese model. "They don't even try to pay for performance," he says. "They don't have any long-term incentives. At the end of the year, the CEO gets about \$500,000 in Japan... and



KPMG PEAT MARWICK'S PETER T. CHINGOS For two decades, he has been a top pay consultant working with major corporations on the design of packages for chief executives. As the partner who heads the big accounting firm's compensation practice, he can't recall a time of greater furor over the issue. "We're reaching hysterical levels of concern," he says. "It's more of a knee-jerk reaction and a paranoia. There are clear examples of abuses out there, and we need to contain those, but they make up only a small minority."

For the first time in his career, Chingos says some compensation committees are asking the CEO to leave the room so that directors can speak with the consultant privately about the boss's pay package. "Even companies that pay their executives conservatively now want validations, second opinions, and more data."

Chingos believes that high pay reflects the limited number of executives who are able to run large organizations successfully. "How many Michael Eisners are there in the world?" he asks. "Companies have to pay a premium for business luminaries. If a CEO can create the kinds of shareholder gains created by an Eisner or [H.J. Heinz's Anthony] O'Reilly, boards are happy to give him what he



SENATOR CARL LEVIN (D-MICH.) When he held his first hearing last May on the executive pay he termed "runaway," Levin, chairman of a governmental affairs committee could persuade only one senator to attend the session. A week later, he was stopped by long enough to read a statement and leave. Undaunted, Levin came a key player in the pay debate, introducing a bill to require better disclosure of compensation practices. A liberal Democrat must have taken a personal pleasure when the issue hit headlines during President Bush's nomination to Japan and when the Securities & Exchange Commission subsequently proposed new disclosure rules on pay.

Levin, who earns roughly \$125,000 a year, says he found it appalling that "companies were laying off workers, asking workers for sacrifices, while at the same time their CEOs were significantly increasing their own salaries. When there is no relationship between pay and profitability of the company, we are in an anticompetitive position."

Intrigued by studies that show executive ownership of stock falling in recent years, he wants the government to require executives to hold exercised stock options for a minimum period to maintain a link between performance and executive's own financial situation.

HOW COMPANIES ARE REFORMING PAY PRACTICES

AT&T Linking option awards to stock performance. Pricing most options at a 20% to 50% premium

AVON Freezing the salary and slashing by half the bonus of CEO for five years in return for stock options

CITICORP Disclosing three years' pay data for top executives in proxy. Includes data on cash bonuses, restricted stock, and options in one table

ITT Requiring stock prices to rise by at least 40% or wait 10 years before executives can exercise any options

UAL Improving disclosure of pay practices in proxy statements; providing its compensation committee access to an independent consultant

DATA BW

needs a solution," Securities & Exchange Commission Chairman Richard C. Breidenbach told a group of corporate leaders at a recent conference on pay. "I can only advise you: buckle your seatbelts." Corporate America's pay ride is already

hand. As the latest round of proxies tumbles out, many observers expect to see rising numbers, as executives, spurred by the surprising rise of the stock market, exercise options. In February, the SEC agreed to

allow nonbinding shareholder votes on compensation at such companies as Bell Atlantic, Chrysler, and Eastman Kodak. Together with the latest paychecks, that shift will make this year's annual meet-

movement, the Business Roundtable has weighed in with its own lukewarm agenda that includes measures already practiced by many boards. And some of the best-known corporations, including Avon

ings a lively show, as disgruntled laid-off employees and corporate gadflies confront management. "You are going to see shareholder meetings turn into pay free-for-alls," predicts Michael S. Kesner, a partner at Arthur Andersen & Co.

To blunt the reform

BIG GUNS SOUND OFF



PURINA CEO WILLIAM P. STIRITZ Like top executives, the chieftain of one of the world's leading food companies is the current brouhaha over executive pay largely on media hype. "It's the form of yellow journalism," he writes, after a shareholder asked for about his pay—\$13.8 million in salary, bonus, and stock—on the company's annual meeting. "It's an easy hit... a red herring. It raises highly divisive issues of employees, shareholders, and management."

Stiritz' way of thinking, critics of executive pay look what he considers the "most important factors" in setting pay: the size of the company and its competitive position in the industry. "The popular press and the pay pundits often mislead and oversimplify," Stiritz says in a written statement to BUSINESS WEEK. "They ignore that to be assessed fairly, executive compensation needs to be viewed in relation to assets under management.... In Japan, compensation needs to be aligned with the unique challenges and degree of difficulty of the tasks at hand. No general industry-pay ratios, ranges, or formulas can be effectively applied as mechanical control management compensation. We are still expecting high risk-reward performance."



UNITED SHAREHOLDERS ASSN. PRESIDENT RALPH V. WHITWORTH As the head of this shareholder-advocacy group based in Washington, Whitworth believes executive pay is a symptom of what he considers the larger problem of lack of accountability in Corporate America. Founded in 1986, the association boasts 65,000 members, mostly small investors who often feel they constitute the silent majority of shareholders. "The CEOs are, by and large, setting their own pay," Whitworth says. "They pick the board of directors, and they pick the compensation consultant. The ultimate solution is to have a truly independent board. Today, you can't find a board member in America who was nominated and elected by the shareholders."

"Executive pay is irrational. There's no connection between pay and performance. Instead, compensation is based more on the size of a company, and that only encourages empire-building. [Companies would] like you to believe that high salaries must be paid to attract and retain these chief executives. It's not true. About 80% of all CEOs come from within their own companies, and they have been salivating for the job for years. In a free market, they would probably take the job for a pay cut, because of the perks, power, and prestige."



SANYO ELECTRIC PRESIDENT SATOSHI IUE As a leader of one of Japan's first-rank consumer-electronics giants, Iue doesn't earn nearly as much as the typical American corporate chieftain. Average pay for the CEO of a big company in Japan is roughly one-fourth as much as his American counterpart's—a fact that often surfaces in the debate over executive pay. But Iue cautions against making such simplistic comparisons.

"It's very hard to compare America and Japan, first because we don't have enough information, and second because the job is so different in the two countries," he says. "In many cases, the president of an American company is carrying 90% of the responsibility for making decisions attached to that office. That's rarely the case in Japan, where so much of the burden of decision-making is distributed among subordinates and where so much is ultimately decided by group."

Iue says his frequent travels to the U.S. have led him to the conclusion that American chief executives put in more hours on the job than many top executives of Japanese concerns. "My feeling is that American company presidents work extremely hard and are under a lot of stress. If I had to work in America, it's quite possible I'd want to be compensated like an American."

Products, IBM, and Westinghouse, have taken to trumpeting CEO pay cuts. "It used to be that you announced your earnings," adds Kesner. "Now, you say: 'Earnings are down, and so is the CEO's pay.' It's the new disclosure."

But with much of the disclosure still of the old, ever-upward variety, the debate over compensation is unlikely to

find a quick resolution. Greed knows no bounds. Compensation is a complex and controversial issue. Few critics agree even about the precise nature of the problem, let alone its solutions. Yet substantial reform is sorely needed, and some companies are beginning to move. "This is a battleship, and I think it's turning in the water," says Perkins.

"But it's going to take time to turn, for a very simple human reason: It's hard to take away a benefit." That may be sooner or later, however, Corporate America's chieftains will have to settle for shoes that fit.

By John A. Byrne in New York, with Dean Foust in Washington, Lois Therrie in Chicago, and bureau reports

TONY O'REILLY: TURNING KETCHUP INTO BIG DOUGH

He's charming, worldly, and shrewd. Now add superrich to the adjectives often used to describe Anthony O'Reilly, chief executive of H.J. Heinz Co. O'Reilly may have set a new record in executive pay last year by collecting \$75.1 million in salary, bonus, and stock options.

Is any business executive worth that much dough? Heinz directors certainly think so. "I'm not a hero worshiper normally, but I tell you this guy really is unusual," says Heinz director F. James McDonald, a former General Motors Corp. president who heads the compensation committee. "We feel that we've got for the company—for the shareholders—an excellent contract with an outstanding CEO."

The vast majority of O'Reilly's \$75.1 million, of course, was the result of an exercise of stock options, some of which were granted to him as far back as January, 1982. O'Reilly's base salary, at \$514,000, certainly wouldn't break any pay records. "I probably have one of the lowest base salaries in Pittsburgh for someone who runs a company of Heinz's size," says O'Reilly. Add his short- and long-term bonuses based on operating goals, and his cash compensation came to \$3.6 million for the fiscal year ended May 1. Stock options, he says, are the ultimate performance incentive. "As a manager, I believe it, and as an owner of a publicly traded company, I practice it," says O'Reilly, who is Heinz's third-largest shareholder, with a 1.6% stake worth \$152.5 million.

FUTURE GAINS. There's no doubt that O'Reilly has done well by Heinz investors. Including reinvested dividends, shareholders gained an annual return of 27.5% for the 10 years ended Dec. 31, far outstripping the 15.5% for

the Standard & Poor's 500-stock index. Even so, Heinz's impressive record trails those of such key food-industry competitors as Sara Lee, Philip Morris, and Kellogg, which boasted annual shareholder returns of over 30% for the past 10 years. For the first nine months of fiscal 1992, Heinz reported a

14% drop in operating income, after excluding a \$221 million gain from the sale of its corn-milling business.

As extraordinary as his income was in 1991, O'Reilly stands to gain much more. In March, 1990, he signed a five-year contract that awarded him the largest single grant of stock options ever: 4 million shares. Heinz's board anted up because they were afraid of losing him—partly because of a conversation more than a decade ago. When O'Reilly, now 55, was named CEO in 1979, the board asked him what he would like to be doing 10 years down the road. "He said, 'When I reach my mid-50s, I would probably leave business work and get into something else,'" recalls McDonald.

RUMORS. Besides his work at Heinz, O'Reilly is a majority shareholder in a publicly traded company with newspapers in Ireland and Australia. What's more, with all the consolidation in the food industry, directors dared not ignore rumors that O'Reilly was being wooed by any number of unnamed competitors.

Still, some criticize O'Reilly's megagrant as overkill. "I don't think there's any question that O'Reilly is tremendous merchandise, but at some point, somebody ought to say enough is enough," argues pay critic Graef S. Crystal. "The reward that he will now receive is far in excess of the risk that he's taking."

O'Reilly insists that what's good for him will pay off for the shareholder. "Heinz Co. was worth \$900 million in 1980, and it's worth \$10 billion today—with the same number of shares issued," he boasts. Now, everyone is wondering if O'Reilly can continue squeezing out those results as routinely as Heinz squeezes ketchup out of tomatoes.

By Maria Mallory in Pittsburgh



O'REILLY MAY SET A NEW RECORD

Year	Highest-paid CEO/Company	Total pay/Millions
1991	ANTHONY O'REILLY H. J. Heinz	\$75.1
1990*	STEPHEN WOLF UAL	18.3
1989	CRAIG MCCAW McCaw Cellular	53.9
1988	MICHAEL EISNER Walt Disney	40.1
1987	CHARLES LAZARUS Toys 'R' Us	60.0
1986	LEE IACocca Chrysler	20.5
1985	VICTOR POSNER DWG	12.7
1984	T. BOONE PICKENS Mesa Petroleum	22.8
1983	WILLIAM ANDERSON NCR	13.2
1982	FREDERICK SMITH Federal Express	51.5

*Excludes LIN Broadcasting's Donald Pels, who got \$186.2 million after a merger triggered a windfall in stock options, and Time Warner's Steven Ross, who collected \$78.2 million after the merger of Time and Warner Communications unleashed huge cash incentive payments

DATA BW

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	Buick Regal Gran Sport	Lexus ES 300
Engine	3.8-litre V6	3.0-litre V6
Transmission	4-speed automatic (std)	4-speed automatic (std)
Touring Suspension	4-wheel independent	4-wheel independent
Brakes	Anti-lock disc	Anti-lock disc
Wheels	16" aluminum alloy	15" aluminum alloy
EPA Est. MPG	18 city/28 hwy	17 city/23 hwy
M.S.R.P.*	\$21,240	\$26,150

*Manufacturer's suggested retail price including dealer prep. Destination charge, tax, license and options additional. Levels of equipment vary.
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THE SECRETS OF RUBBERGATE

Directly or not, taxpayers helped keep the House Bank afloat

It's early December, 1990—orientation day for the House of Representatives. Like a bunch of awestruck college freshmen, three dozen newly elected members are milling around the coffee and danish table in the Cannon House Office Building. They are about to begin a series of seminars explaining how to run a congressional office and tap into the House's intricate system of allowances for everything from staff to stationery. In their orientation packets, they find a long list of perks—and instructions on how to obtain a book of checks for drawing funds from their own non-interest-bearing accounts at the House Bank.

Unbeknownst to the newcomers, Jack Russ, then sergeant at arms, assigned them accounts even if they didn't ask for the privilege. Some members, recalling the situation today, admit they were puzzled. "The first question most of us had was why anyone would want to put money in a non-interest-bearing account," says one House member. The answer was never written down, but Hill veterans knew the secret: The bank provided free overdraft protection worth up to \$2,000 a year and, indirectly, interest-free loans up to a members' net monthly salary, or about \$7,000. This more than compensated for the lack of interest on deposits.

ONE DOWN... Now, in the consuming firestorm of "Rubbergate," the bank's secret is out. Revelations that 355 current and former House members, including three members of President Bush's Cabinet, wrote bad checks have been

splashed across the nation's front pages. In an event that chilled lawmakers to the bone, incumbent Democrat Charles A. Hayes was defeated in the Mar. 17 Illinois primary, largely because of his overdrafts.

While the benefits to lawmakers are clear, what still remains shrouded in mystery is how the 155-year-old bank actually operated. It had some of the trappings of a commercial banking institution—accepting deposits, offering checking accounts, and, indirectly through the overdrafts, making loans. But Congress has long insulated itself from the laws it imposes on others, from civil rights to workplace safety, and the House Bank was similarly exempt from the state and federal regulations that govern more traditional banks. It did not have to pay attention to rules requiring charters,

Members wrote checks to third parties such as dry cleaners, which were processed by the Federal Reserve's national check-clearing system and returned to the House Bank

capital reserves, examinations, and fees for deposit insurance.

What's more, an analysis of some of the arcane procedures at the bank suggests that despite denials by lawmakers, taxpayers' money was used to support the bank's operations. Every year, taxpayers footed the bill for the salaries and other administrative costs of running the bank, to the tune of at least \$1 million. Furthermore, taxpayers may have helped finance House members' overdrafts. These were so pervasive that the staff included one person whose sole job

was to ask members to cover their bad checks. When members overdrew their accounts by more than their next month's net salary, as was often the case, "technically and legally, they were dipping into public money," says Representative Fred Grandy (R-Iowa), one of six House members who investigated the bank scandal.

NO OVERSIGHT. Just how large the taxpayer subsidy will be difficult to determine. In many ways, the bank, which the House closed in December, was a comical mom-and-pop operation. Its noncomputerized record-keeping system amounted to scraps of paper in a shoebox. Bank employees had no written procedures for handling checks.

This slapdash arrangement enabled Russ, who has resigned over the scandal,

The House Bank wrote checks on the Treasury account in amounts equal to the third-party checks it was called upon to pay. Riggs processed members' other checks free of charge

to handle vast sums of money with virtually no oversight. On the first of each month, he wrote checks for about \$1.5 million, drawn on an account at Treasury established to pay members' salaries. In fiscal 1991, Congress appropriated \$63 million to fund this account. The \$1.5 million was moved to a second Treasury account, against which monthly payroll checks were drawn. As Treasury's fiscal agent, Russ had exclusive use of both accounts.

Russ also sent a messenger each day to Riggs National Bank of Washington, D.C., where he had a third account. From this account, the messenger picked up a fresh supply of greenbacks so he could cash checks for members with accounts, and also for congressional staffers and the press, who had check-cashing privileges but not accounts at the institution. Like a real bank, the House Bank used the Federal Reserve System's check-clearance system. Usually only banks that maintain reserve accounts at the Fed are permitted to use this system. Checks that a member made out to, say, a local dry cleaner traveled from the dry cleaner's local bank to the Baltimore branch of the Federal Reserve Bank of Richmond.

The Baltimore Fed bundled up the House Bank's checks daily, and a courier drove to Washington and presented them each morning to the House Bank.

HOW THE HOUSE BANK WORKED

House members' paychecks placed in an account at Treasury to which House Bank had access. Riggs Bank was a conduit for other House Bank deposits

4 Checks written on insufficient funds were not bounced. Treasury funds, as well as deposits of other members, may have been used to cover overdrafts

in, in the late afternoon, the courier returned to the House Bank and picked up a check, drawn on the monthly payroll account at Treasury for the amount of the checks the House Bank honored. The House Bank used a different procedure to deal with nonpayroll deposits in members' accounts. These deposits were collected by a House bank cashier at the end of each day, delivered to the Riggs account. The commercial bank would transfer the dollar value into the sergeant at arms's account at Riggs. Then, Riggs would reissue the checks to the commercial banks on which they were drawn or place them in the Federal Reserve System for collection. Riggs would do the same for checks drawn at the House Bank or drawn on other bank accounts.

Y SETUP. To reimburse Riggs for this service and for the maintenance of the sergeant at arms's account, Treasury paid the bank a fee. Neither Riggs nor Treasury officials would reveal the amount, claiming that Riggs competitively bid for the account and that the information is proprietary. A senior government official insists that whatever Riggs was paid was more than compensated for by interest payments that accrue to the Treasury from the \$1 million average daily balance in the monthly payroll account. The money to the House Bank or to House members for the check-cashing service: zilch.

It sounds as if this cozy arrangement, free from administrative expenses, netted the taxpayers a penny. However, **BUSINESS WEEK** has learned that that might not be the case, largely because of the extent of the overdrafts. House members wrote hundreds of checks each month in anticipation of paychecks that were deposited at the beginning of the next month—technically a kiting arrangement. These checks would have bounced had they been written at a com-

mercial bank, but the House Bank simply covered the checks until the payroll arrived. Indeed, 19 current members wrote checks in excess of their net monthly pay 391 times over the 39-month period scrutinized by the House Ethics Committee. That's close to \$900,000 of overdrafts.

The House leadership has said that the bank could cover these checks without dipping into the Treasury because members who did not empty their accounts each month were, in effect, making an interest-free loan to their overdrawn colleagues. But there may be another explanation of how the rubber checks were covered.

It involved the two accounts at Treasury, the annual appropriations account and the monthly payroll account. Treasury officials say it's possible that Russ was covering shortages in the payroll

least \$1 million. But as long as the total amount of the House Bank's overdrafts never exceeded the money in the appropriations account, the payroll account would never show a negative balance. If Russ used the appropriation account to cover shortfalls, however, members may have been, in effect, borrowing from the Treasury to cover overdrafts.

TIP OF THE ICEBERG? Officials at Treasury and Riggs say they know only pieces of the full picture. Representative Grandy suggests that further investigation is needed. A preliminary criminal inquiry is already under way at the office of U.S. Attorney Jay B. Stephens. According to a source familiar with the investigation, the inquiry is looking at "everything," including whether lawmakers violated tax laws, possibly by failing to report interest-free loans as income. Investigators are also probing



Former Sergeant-at-Arms Jack Russ assigned accounts to new representatives whether they requested them or not. The bank's slapdash bookkeeping system let him handle vast sums of money with virtually no oversight



account by borrowing from the appropriations account. "If he were to cover a shortfall, we wouldn't know it," says a senior Treasury official. He says Treasury handles a billion checks a year, "so it would be almost impossible to link one check" with an attempt by Russ to cover a shortage. Riggs officials say they would have no way of knowing which account Russ was using, since they only knew what was in the account at Riggs. Russ declined comment.

According to the Treasury, the payroll account always showed a balance of at

whether members illegally used House Bank funds in congressional campaigns or violated mail or wire-fraud statutes or a District of Columbia law against intentional overdrafts.

Watergate II? Hardly. But because the revelations do indicate a certain devil-may-care mindset on Capitol Hill, voters are treating the scandal as big news—and are thrashing members caught in its web faster than you can say: "zero balance."

By Paula Dwyer, with Mike McNamee, in Washington



GAME, SET AND



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IT'S VERY WELL MADE IN TAIWAN



IN A HONG KONG BRANCH: FROM SEOUL TO BOMBAY, CITI IS REDEFINING THE BANKING BUSINESS

FOR CITIBANK, THERE'S NO PLACE LIKE ASIA

Its growth there is a far cry from its performance at home

Russell Chen, the 33-year-old owner of a computer-parts company, is typical of the millions of young, newly affluent entrepreneurs who are energizing Asia's booming economies. When he discovered that his bank had moved to another neighborhood far from his Taipei office, he began looking for an alternative. A flashy brochure from Citibank caught his eye, and Chen opened an account. The U.S. bank offered all the standard products, as well as the ability to bank in eight different currencies. But the clincher came when Chen learned of Citi's banking-by-phone feature, a convenience that remains alien to many local banks in Taiwan. "I can switch \$80,000 from a savings account to checking just like that," says Chen, snapping his fingers.

Citibank is chasing—and landing—yuppies like Chen by the thousands. From Seoul to Bombay, Citi is redefining the region's notion of banking. Most important, it is pioneering the concept of consumer credit. Besides mortgages and auto loans, Citi offers round-the-clock phone banking and automated teller cards that can be used in Singapore as well as New York.

The strategy is paying off big. Since 1986, when Citi began pushing retail banking in earnest, Asian accounts have swelled from 1 million to an expected 5

million this year. And annual profits have climbed accordingly, says Citi, from \$28 million to a projected \$200 million on revenues of \$1 billion.

That's in stark contrast to Citi's pitiful showing back home, where it continues to grapple with bad real estate loans. Profits from Citi's worldwide consumer business tumbled to \$549 million last year from \$905 million in 1990, largely because of problems in the U.S. In all, Citi lost \$457 million in 1991. Says Pei-yuan Chia, head of Citi's global consumer banking business: "The reason we are handling the situation today is our very strong franchise outside the U.S."

And the Asian consumer business is getting stronger. Citi's 18 Japanese branches are still relatively new and have attracted little business. Elsewhere in Asia, however, Citi's retail

network is growing by 25% to 30% annually (table). Rana G. S. Talwar, head of Citi's consumer banking in Asia, sees no slowdown. Outside of Japan and China, there are 10 million individuals making \$30,000 a year or more, Citi's target market. By the end of the decade, Citi sees the number tripling as local economies mature.

DEBT VIRGINS. A big reason for Citi's success is that most foreign banks still shy away from developing countries such as India, Indonesia, and Thailand. Their rationale is that these markets are too small and that consumers lack experience in handling personal debt. Over the past two years, Citi's only big U.S. rival in the Far East, Chase Manhattan Bank, has withdrawn from Taiwan, Malaysia, and Indonesia in order to concentrate on Hong Kong and Singapore.

Citi, however, is gambling that such Asian economies won't remain backward. Consider India, with a population of 860 million. The growing middle class still rides mopeds. But within a decade, Citi bets they'll be buying BMWs. To take advantage of that possibility, Citi has positioned itself as one of the country's leading moped-loan originators.

In more developed regions, Citi, long powerhouse in Asian private banking, has used its upscale image to woo customers. In status-conscious Singapore, Citi has financed more than 150 golf memberships, which cost upwards of \$100,000 each. Asia's yuppie class is also dazzled by Citi's global reach. Already when clients in Singapore, Japan, and Taiwan visit the U.S., they can withdraw cash from Citi accounts back home by popping a card in an ATM or calling a toll-free number.

As in the U.S., Citi's card business remains the centerpiece of the bank's consumer activities. The heaviest marketing campaign, orchestrated by executives recruited from the likes of PepsiCo and Chesebrough-Pond's, centers on the bank's Visa, MasterCard, and Diner's Club business.

Citi is hitting the airwaves with some of Asia's slickest, steamiest ads, created by J. Walter Thompson Co. and Leo Burnett Co. TV spots in tight-laced Singapore have shown lovers kissing passionately. Another featured a sexy model stripping off her business suit and slipping into funky garb for a night of partying. Just three years after entering Asia's credit-card business, Citi has signed up 3 million accounts, making it the region's No. 2 issuer behind American Express Co.

Some competitors think Citi is pushing too hard too fast. Credit checks, for instance, are a big problem. In Thailand, where Citi has issued 70,000 cards in less

CITI'S ASIAN INVASION

Country	Assets Millions	Three-year growth
HONG KONG	\$1,742	22%
SINGAPORE	986	29
TAIWAN	944	56
THAILAND	609	75
INDIA	542	57

DATA: CITICORP

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In two years, there are no credit bureaus, so banks must trust their own ability to determine a customer's ability to pay. And it's true that many Asians have little experience with personal debt. One Asian competitor: "You aren't getting people by inundating them with credit that they can't handle."

Several Asian governments are also wary of the consumer-credit boom. Officials fear that too much household borrowing will erode the high level of personal savings, which provide cheap capital for industrial investment. And the governments have begun to crack down on personal debt. Last year, Singapore hiked the minimum income needed to qualify for a credit card from \$15,000 to \$18,750 per household. The government also decreed that credit cards could not exceed two months' salary. Malaysia is taking similar action. Citibankers are unfazed. "You can't lead a leader without blazing new paths,"

says Asia consumer chief Talwar. "But we aren't a bunch of gunslingers, either." So far, Asians have proven to be stellar credit risks, he says. Even though Citi's Asian mortgage business has grown from 50,000 loans in 1987 to 125,000 last year, delinquencies have been virtually nil. Moreover, adds Talwar, by yearend, the Asian credit-card business should move "well into the black"—two years ahead of schedule. As for social impact, Talwar sees only positives: "Middle-class families now own houses in Malaysia and Taiwan because we pioneered mortgages."

FEWER OPTIONS. Other possible constraints may be more difficult to overcome. In the U.S., Citi's consumer business has securitized and sold off loans, but it has been unable to do so in Asia because there are no secondary markets for such issues. As a result, Citi is carrying some \$7.5 billion worth of car loans and mortgages on its books financed

mostly by deposits. Given the current pace of growth, Talwar believes the bank may have to cut back lending within five years.

More pressing is the impact of Citi's U.S. troubles. The run on Citi's Hong Kong branch after Representative John D. Dingell (D-Mich.) called Citi "technically insolvent" was a grim reminder that progress in Asia is tied to the fortunes of the parent. Analysts have speculated that Citi may be tempted to sell profitable overseas franchises to cover bad debts at home. Last year, it shed its retail bank in Italy to raise money.

Asian Citibankers insist that doesn't seem likely in Asia. With its U.S. operations fighting to regain profitability, the bank has a strong motivation to do everything possible to rope in more customers like Russell Chen.

By Pete Engardio in Hong Kong, with Bruce Einhorn in Taipei and bureau reports

CITI IS SUDDENLY LOOKING A LOT STURDIER

Last fall, Citicorp Chairman John S. Reed's bold campaign to buttress his ailing bank with upwards of \$1 billion appeared dead in the water. In October, Citi announced a third-quarter loss of \$885 million, a staggering hit that damaged Citi's already-scarcerated capital base. Wall Street analysts questioned whether Citi would be able to raise any new capital. There were even talk that the 53-year-old Reed could be forced to step down.

Now, many of those critics have been forced to hold their tongues, at least temporarily. Over the past five months, Citi has shed a slew of business interests, ranging from a small stake to a stake in Saudi American Bank (table). In all, analysts estimate that the sales could improve Citi's capital cushion by more than \$800 million. On Mar. 13, Citi announced that it would sell \$150 million of preferred stock to the public—the bank's first public offering in a year. Many analysts now believe that Citi's core capital, which stood at 3.7% of assets at the end of 1991, will soon reach the 4% minimum that regulators have mandated for the end of 1992.

What's behind the recent success of Citi's capital plan? A key factor is the market's improved perception of Citi. Indeed, Citi's stock price has almost

doubled, to 17, from just below 9 in mid-December. True, Standard & Poor's Corp. downgraded Citi's preferred stock after the bank announced its latest issue. But "there's a feeling that the worst is over," says analyst Frank De Santis of Donaldson, Lufkin & Jenrette Inc. The deterioration in Citi's loan portfolio has slowed, and most analysts agree that, after losing \$457 million in 1991, the bank will be profitable this year. Even talk of Reed's demise as CEO has subsided.

Citi's improved image has strengthened its bargaining position in the asset disposals. "There's no longer an impression of a fire sale," says a Wall Street investment banker.

CITI'S CAPITAL-RAISING

In addition to a planned sale of \$150 million in preferred stock, Citi is boosting capital by unloading the following assets:

AMBAC Sold share in the bond insurance company in January for \$100 million gain. Sale frees \$200 million in capital

SAUDI AMERICAN BANK Unloaded 10% stake in December for \$203 million gain

LYNCH, JONES & RYAN Disposed of small brokerage subsidiary in December for as much as \$15 million

ESTABLISHMENT SERVICES Shopping merchant credit-card processing business, which could fetch \$150 million

CAPITAL MARKETS ASSURANCE Agreed in November to sell securities insurer. Deal could free \$200 million in capital

DATA: COMPANY REPORTS, BW

Citi's sale of AMBAC Inc., the bank's municipal-bond insurance subsidiary, is a good example. The first offering of 50.3% of the unit last July was priced at \$20 a share, or \$352 million—30% less than what Citi had hoped for. After fees and taxes, Citi ended up booking a \$48 million loss on the sale. When the bank sold its remaining 49.7% interest, it raised \$550 million, or \$31.75 a share. The result: a \$100 million gain.

LONG SHOT. While Citi's capital drive has been impressive, analysts are beginning to wonder whether Reed is running out of attractive nuggets to sell. Morgan Stanley & Co. is trying to put together a deal to sell Quotron Systems Inc., Citi's ailing electronic stock-quote system. But investment bankers view that as a long shot at best. And Citi has backed away from the possibility of selling 20% of its credit-card business. Higher delinquency rates have no doubt diminished the appeal of the business. Executives from Citi's consumer bank are also said to oppose such a sale.

A more fundamental question is whether Citi will be able to keep up with regulators—and the marketplace's—rising perception of how much capital a solid bank should have. Analyst Raphael Soifer of Brown Brothers Harriman & Co. estimates that Citi would need an additional \$4.5 billion to reach Chemical Banking Corp.'s 6% capital ratio. "Capital strength is a moving target, and it has been moving steadily upward," says Soifer. That means that Reed's bold capital plan may have to get even bolder.

By John Meehan in New York

HUNKERING DOWN IN THE OIL PATCH

While Wall Street sneers, contrarians settle in for the long haul

To call energy stocks "laggards" would be an understatement. As the Standard & Poor's 500-stock index climbed 24% over the past 15 months, S&P's Energy Composite index went south, losing 7.5%. Sure, oil and gas stocks look dirt cheap, but investors and even industry analysts are treating them like dirt. Asked for his picks, analyst Mark P. Gilman of County NatWest Securities USA gives a simple answer: "None. Zero. Nada."

That's just the kind of response that perks up the ears of contrarians—those who buy out-of-favor stocks at rock-bottom prices and wait for an upturn. Since most oil stocks pay hefty dividends, it's not hard to be patient (table). Despite the generous yields, "energy stocks have very few friends these days," says money manager Edward C. Rorer. His firm, Rorer Asset Management, has loaded up on such stocks as Arco, Texaco, and Unocal—and he's looking for more.

DOWN AND OUT. It's not hard to see why Wall Street is so down on energy. Oil trades around \$19 a barrel, and few expect this year's average oil price to approach 1991's \$21.50. Although OPEC members have not flooded the market, some fear the return of Kuwait, and possibly Iraq, could cause a glut. Natural-gas prices are at the lowest level in 10 years. Refining and marketing, which often take up the slack when crude sags, are slumping, too. And petrochemicals are suffering from overcapacity and a sluggish global economy.

"For the first time in 60 years, not one cylinder in the energy engine is working," says analyst Frederick P. Leuffer of C. J. Lawrence Inc. He expects the operating earnings of the major international and domestic oil companies to be down 50% for the first quarter of 1992 from the same period last year. For the year, he figures earnings will be flat.

Most analysts expect the industry, and the stocks, to bottom out this year, with no upturn until 1993. So investors buying the stocks now will need patience. Oil stocks, notes analyst Paul B. Ting of Oppenheimer & Co., usually underperform the market during recessions but outperform in recoveries.

As the U.S. economy starts to expand again this year, the major domestic oil

marketers in California, where the automobile is king.

Contrarians are finding opportunities among other domestic oil companies too. They like Occidental Petroleum, Phillips Petroleum, and Unocal. All three have aggressively slashed debt during the past two years. That should bring more revenue down to the bottom line when prices recover. Sun Co. wins kudos for cutting costs and improving efficiency. Primarily a refining and marketing company, Sun is best positioned to profit from a pickup in gasoline and jet-fuel demand. It could earn \$1.80 a share in 1992, vs. last year's \$1.45-per-share loss.

FOREIGNERS. Opportunities lurk among international oil companies, too. Royal Dutch Petroleum Co. is a favorite of W. Anthony Hirschler, president of Brandywine Asset Management, which has 12% of its \$1.4 billion portfolio in energy

stocks. The European giant is taking advantage of the industry slump to boost capital spending. Hirschler thinks the company, one of the handful that increased dividends in 1991, has the wherewithal to do it again in 1992.

Hirschler isn't the only one looking to foreign oil giants. Oppenheimer's Ting recommends France's Elf Aquitaine, whose stock, like Royal Dutch's, trades as American Depositary Receipts on the New York Stock Exchange. Elf is expecting a 35% increase in production over the next five years—thanks to major oil-producing properties in the North Sea and in Africa. The company is also the only major oil company with production-sharing contracts in the Commonwealth of Independent States: one in Russia, the other in Kazakhstan.

There are even thriving companies in the beaten-down natural-gas industry. Enron Corp., for instance, has branched off into independent power generation and used aggressive marketing to

boost natural-gas sales. Says analyst M. Carol Coale of Howard, Weil, Labovitz & Friedrichs Inc. in Houston: "There aren't that many companies that can make money in a depressed environment."

Those who invest in the beleaguered energy stocks need fortitude. But they can draw their courage from the Wall Street crowd. When oil analysts can find even one stock to recommend, an energetic turnaround can't be far away.

By Stephanie Anderson Forest in Dallas

BARGAINS IN THE ENERGY STOCKS

Company	Price	P-E ratio	Yield
ARCO Operates the two largest oil fields in the U.S.	100%	23	5.4%
BRITISH PETROLEUM Heavy on debt, but the dividend is appealing	55%	33	8.6%
ELF AQUITAINE Has production-sharing contracts in the former Soviet Union	32%	NA	4.8%
ENRON Innovation, aggressive marketing help to grow profits	37	17	3.5%
EXXON Financially sound, likely to increase dividend in 1992	55%	13	4.8%
KERR MCGEE Widely diversified energy company, dividend safe	36%	18	4.1%
OCCIDENTAL PETROLEUM Restructuring paid off \$3 billion in debt and improved efficiency	19%	16	5.2%
ROYAL DUTCH PETROLEUM Strongest balance sheet, one of the few to boost dividend in 1991	76%	15	4.7%
SUN Should benefit greatly from a recovery in refining and marketing	28%	NA	6.2%
UNOCAL Strong cash flow. Will reduce total debt by 12% this year	21	37	3.3%

NA = Not applicable (company lost money last year)

DATA: SURVEY OF ANALYSTS AND MONEY MANAGERS

companies such as Arco should feel the impact first. Arco operates the two largest U.S. oil fields, Alaska's Prudhoe Bay and Kuparuk River fields. As a result, Rorer sees it as "the company that's going to be the biggest beneficiary of improving oil prices." True, with production beginning to decline at these fields, Arco needs to make new discoveries or buy reserves elsewhere. But the company has another strength: It's one of the largest and most profitable refiners and

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BY GENE G. MARCIAL

WHAT'S PUMPING NEW LIFE INTO ADVANCED MEDICAL?

While most companies would probably give up their corporate jets to carry the biotech label, Advanced Medical wants out of the business. The company, which owns sizable stakes in biotechnology, has been selling those assets and transforming itself into a maker of intravenous infusion pumps.

What's the big idea? Chairman and CEO Richard Proper thinks AM's proprietary IV pump technology will be a big moneymaker. Money manager Charles Gunther of Van Kasper, an investment firm in San Francisco, agrees. "By the end of 1992, Advanced Medical will become profitable as a specialized, strongly financed maker of high-margin medical instruments," he says. The stock will be a big winner, adds Gunther, once investors recognize the "substantial profit margins" available in the company's new line of business.

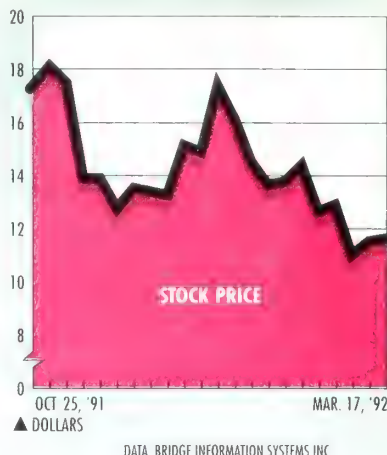
Advanced Medical's stock has been on the retreat since October, when it hit 18 a share. But the stock's plunge to as low as 10 in early March and the company's new focus on its low-cost IV pump have caught the fancy of some smart investors. Their recent buying has pushed up the stock to around 12.

HEALTHY REWARDS. Advanced Medical owns exclusive worldwide rights to a new fluid-delivery technology that uses a microcomputer to control the pumping of fluids into the body. And the technology makes it possible to build portable infusion pumps, which are lighter and easy to use, he adds. "They offer great economy in replacing the old, complex electromechanical pumps," he says. Advanced Medical expects to get government approval this year for the marketing of the pumps.

A number of companies have already approached Advanced Medical for strategic alliances, says one investor. Proper, who was previously a pediatric oncologist and a professor at Harvard University Medical School, admits that talks are now under way with several big medical-instrument companies on possible joint ventures for the pumping technology and other new products.

Gunther says Advanced Medical's stock is undervalued and expects it to double in the next 18 months. He fig-

ADVANCED MEDICAL: READY TO SNAP BACK?



ures AM will earn \$1.20 a share in 1994 and 80¢ in 1993, up from several cents this year. Another analyst, Kidder Peabody's Ruth Alon, who issued a buy rating on the stock on Mar. 18, sees earnings of 20¢ this year, and 70¢ to 75¢ next year. "Both estimates are low," says one insider.

AN LBO ROOKIE MASTERS THE GAME

Beating the big Wall Street sharpshooters at their own game is every investor's dream. Management consultant Robert Shaw, who did just that to break-up boys Kohlberg Kravis Roberts, ended up owning International Jensen for practically nothing and made a bundle when he took the company public on Feb. 12, at 11½ a share. It now trades at 14.

Shaw still owns some 38% of the company, worth \$30 million or so. At the public offering price, Shaw raked in a cool 480 times his original investment. Here's how Shaw used just \$65,000 of his own money to buy Jensen from KKR in 1988 and, some 40 months later, sold 10% of his 2.6 million shares for \$2.5 million.

Jensen, a maker of loudspeakers for cars and home audio systems, was a unit of the conglomerate Esmark, which ended up being acquired by Beatrice in early 1988. Beatrice, in turn, was acquired by KKR in one of the most celebrated LBOs of the 1980s. Shaw had been hired by Esmark in 1984 to turn Jensen around.

Shaw got the chance to buy Jensen when KKR started selling off pieces of Beatrice. Using KKR's own strategy,

Shaw borrowed 80% of the \$15.7 million purchase price and linked up with William Blair, the Chicago investment bank, which financed all but \$65,000 of the rest of the cash, to buy Jensen in 1988. Based on its market cap, Jensen is now worth \$75 million.

Shaw is now Jensen's chairman, president, and CEO and has turned the company to profitability. "Jensen today is debt-free and enjoying robust sales of both automotive and home speaker systems," says investment adviser Charles Allmon, editor of *New Issue Digest* in Chevy Chase, Md. Jensen's major customers include Ford, Chrysler, and Mazda. Retailers that sell its products include Wal-Mart, Kmart, and Sears Roebuck. Per-share profit for the first nine months of fiscal 1992, ended on Feb. 29, rose to \$1.42 a share from \$1.01 in the same 1991 period.

A NEW PLAY FOR AN OLD-TIMER

Guess who's attracting new interest in the volatile upstart IPO market? None other than one of those old, big blue chips, Owens-Illinois. This major producer of glass and plastic packaging containers was acquired in a leveraged buyout by KKR in 1987. On Dec. 11, KKR took it public again by selling 60 million shares at 11 apiece. The hot offering quickly shot up to 14, before cooling down to 12.

"At its current price, the stock is truly cheap—it's one of the world's largest packagers and makes one of every two glass containers produced worldwide," says Stuart Shikar, managing director of Prudential Investment Management, which oversees assets of \$2 billion. He figures that the stock has a lot of elbow room on the upside, perhaps to the mid-20s over the next 12 to 18 months. "It's a global-class company that dominates a huge industry and is selling at a modest price-earnings ratio of 10," he adds.

Owens-Illinois is a "perfect economic-recovery play," Shikar notes, because the container and packaging business definitely benefits from any rise in business activity. As a low-cost producer, Owens-Illinois' operating profit margin has been widening. So earnings are pointing up, he adds. Shikar projects earnings of 90¢ a share for this year and \$1.25 next year, up sharply from 1991's 63¢. Revenues are expected to rise to \$3.8 billion this year and to \$4.1 billion in 1993 from last year's \$3.6 billion.

A New Dimension In Teaching Science.



For years, educators have seen worlds of potential for TV as a teaching tool. Television can bring dry theory to life—and transport young people to new dimensions of understanding. Public television station Thirteen/WNET in New York and Texaco recognized that the key to finally fulfilling television's potential is to focus on our most valuable educational resource: the teacher. With a grant from Texaco, WNET developed the Teacher Training Institute for Science, Television and Technology. Praised by the U.S. Department of Education, TTI shows teachers how to integrate action-packed, colorful programming into their curricula to turn young minds on to science in a TV generation. After a highly successful and acclaimed pilot program, TTI is expanding to many parts of the country, thanks to a grant from the Corporation for Public Broadcasting and additional funding from Texaco. Now science teachers and students across the U.S.A. can benefit from this exciting, new dimension in teaching. Texaco is proud to help motivate a new generation of young scientists with new worlds to conquer.

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WYNN'S WORLD: WHITE TIGERS, BLACKJACK, AND A MIDAS TOUCH

His Mirage casino has won over high rollers. Now, he's betting on the 'mass-market' crowd



It's not starting out as a good day for Steve Wynn. The flamboyant chairman of Mirage Resorts Inc.—the man who brought white tigers and exploding volcanoes to Las Vegas—is having problems with his wristwatch. "See that," he says impatiently to the nervous-looking manager of his hotel's jewelry shop. "It's the face. Every time I move my wrist, it slips off to the side." It's the third time Wynn has summoned the manager, and it's the third time that he has sent him off to find a new watchband.

Those who know Stephen A. Wynn well understand the jeweler's dilemma. Mercurial, always demanding, Wynn is a man with an unshakable notion of how he wants things done. He builds the fanciest, most expensive casinos in town, and, like a rich man's P. T. Barnum, draws in high rollers and celebrities to make the projects pay off. "People love to bad-mouth Steve because he can be extravagant and showy," says Jack Binion, who runs Binion's Horseshoe casino. "But just about everything he touches turns golden, and no one is going to deny that."

Two years ago Wynn laid down the heaviest wager Las Vegas had ever seen: a \$630 million hotel extravaganza called the Mirage. Many scoffed that he'd never make it pay, but Wynn won the bet. Today, the Mirage is a cash machine, and its great attraction is pure Wynn hyperbole. A five-story volcano out front explodes every 15 minutes during the evenings. White tigers behind glass and sharks in a tank greet guests in the lobby. Out back, dolphins frolic in an enormous pool.

AUSSIE FORAY. Donald Trump in Atlantic City is also known for his extravagant casinos. But while Trump's debt-burdened Taj Mahal was forced to restructure, Wynn is laying plans for more expansion. Wynn wants to develop casinos in Australia and Argentina, where national governments may sanction gambling. And pending regulatory approval, Mirage has been signed to develop casinos on Native American land for the Sac and Fox nation in Kansas and the Puyallup tribe in Washington state.

But those projects are like nickel slots compared to the next big bet Wynn is placing on Vegas. With the paint on the Mirage barely dry, he's spending \$430 million on another 3,000-room casino hotel called Treasure Island. Planned for an 18-acre site next to the Mirage on the Las Vegas strip, the new project will have its own splash of daring. In a 360-foot water-filled canal, mock pirate ships will stage gun battles where stuntmen catapult into the air as explosions appear to destroy their vessels. "It's dynamite, pure magic," bubbles Wynn. "Shiver me timbers, walking the plank. Who could resist that?"

He had better hope nobody. With both Circus-Circus Enterprises Inc. and Kirk Kerkorian building big Las Vegas casinos, the desert landscape is getting pretty crowded. Recession has depressed occupancy rates, and Vegas gaming revenues have dropped for two years running. What's more, Wynn's Mirage is cannibalizing patrons from his own Golden Nugget casino downtown. Nugget revenues slipped 21% last year.

In that environment, Wynn's new project is fraught with risks. For one thing, its original \$300 million price tag has surged by more than a third since Wynn announced it in October. To cover the increase, he has hiked a proposed new issue of mortgage-backed notes from \$200 million to \$300 million. Keeping the price down is crucial because Wynn intends to market the new casino to what he calls the "mass market," eschewing the high rollers that his places usually attract. That will mean setting room rates at \$50 or less, about half the Mirage's current rate.

"Steve's problem has always been that he's a tinkerer," says Los Angeles-based casino consultant Saul F. Leonard. "He's so creative that he just can't stop himself." On this day, as he does every day, Wynn is

looking over plans at Atlandia Design, Mirage's in-house design department. Thirty pounds lighter from two months of dieting, he's holding a bag of microwaved popcorn as he argues with Atlandia's top designer, Joel Bergman. The problem? Valets retrieving cars will have to veer around several columns to get out of the garage. Wynn would rather move the columns, which will hike costs. And though Bergman objects, the change will be made.

Wynn has always been that aggressive. The son of a Maryland bingo-parlor operator, he got his start in 1967 by paying \$35,000 for a tiny piece of Las Vegas' Frontier Hotel. Five years later, he bought stock in Mirage's predecessor, Golden Nugget Inc. There, he uncovered employees of the take and



**VEGAS VESUVIUS:
A "VOLCANO" IN
FRONT OF THE
\$630 MILLION
MIRAGE "ERUPTS"
EVERY 15 MINUTES**

was named chairman to clean it up. Since then, his rise in the industry has been impressive. After turning the Nugget into a moneymaker, Wynn opened a small-golden Nugget in Atlantic City in 1980. It became one of the city's most profitable casinos and cemented the Wynn formula. Attracting high rollers in by helicopter from New York and Philadelphia, offering them a variety of credit, and booking big acts like Frank Sinatra, Wynn filled the place with big spenders. When he sold out to Bally Manufacturing Corp. in 1987 for \$440 million, his pretax gain was \$170 million. The timing of Wynn's departure from Atlantic City was uncanny: Within a few months, the overbuilt resort began a long decline. By then, Wynn was already focused on the Mirage. To build it, \$3,000-

room hotel, he pushed the company's total 1990 debt load to more than \$1 billion—66% of capital. He spent \$45 million to build a 320-acre golf course lined with 10,000 pine trees trucked in from Canada. And he signed Siegfried & Roy, the illusionist act, to a five-year deal worth \$47 million. With all the hoopla, many skeptics thought the debt service would eat him up.

IF YOU BUILD IT... Wynn rolled the dice anyway. "What people didn't understand is that we're selling fun and games and wham-bam-thank-you-ma'am excitement," he says. "You build something big and fancy, and people are going to want to come and see it." They did. In 1991, the Mirage's second year, operating cash flow hit \$201 million, which analysts contend is a record for a single casino property. That was enough for Wynn to retire nearly a third of the company's debt. Mirage Resorts' net income leaped 57% in 1991, to \$46.8 million, though the recession clipped 9.5% off revenues, which came in at \$822.8 million.

The Mirage's secret wasn't just a fancy building. Wynn raided other casinos, stealing top-paid marketing employees with worldwide contacts. He has two private jets in the air most of the time, which operatives in Asia fill with some of the world's richest gamblers. He has also discovered the magic of boxing. Wynn startled the fight game by paying \$40 million to promote the Buster Douglas-Evander Holyfield heavyweight bout in 1990. The fight lost \$2 million—but it lured enough big spenders into the casino to offset that deficit severalfold.

While promoting the fight, Wynn also ran smack into his longtime nemesis: Donald Trump. Wynn has never forgiven him for buying 4.9% of Golden Nugget's stock in a stalled 1987 takeover bid.

Boxing promoter Mike Trainer says that while hawking

closed-circuit rights for the Douglas-Holyfield fight, Wynn refused to sell to any of Trump's Atlantic City casinos. When other casinos told Wynn they liked to bid as a group, he skipped Atlantic City altogether. Trainer figures the snub cost him \$250,000.

Wynn definitely does things his own way. But who's to argue? He owns 33% of Mirage's stock, and his brother and wife sit on the board. He pays himself \$2 million a

year and lives like the celebrities he courts to add glitter to his casinos. At his 50th-birthday party in January, guests included actor George Hamilton, Quincy Jones, and former baseball commissioner Peter Ueberroth. Michael Jackson is a frequent guest in the Mirage's posh bungalows. He likes to watch the dolphins.

Wynn and his wife, Elaine, have been together for 28 years, though they were divorced five years ago and remarried last

June. Since 1978, they have lived in the same place near Las Vegas, but they just bought the house next door in order to tear them both down and build an 8,000-square-foot mansion in their place. An exercise fanatic, Wynn loves to jog and hit the Stairmaster. A lack of peripheral vision caused by the eye disease retinitis pigmentosa keeps him from driving, but it doesn't preclude golfing or skiing.

Wynn's brash, take-it-or-leave-it style annoys a lot of people in Las Vegas. But most think he's good for gambling. Henry Gluck, chairman of rival Caesar's World Inc., puts it this way: "You have to separate the ego from the accomplishments. We don't care what he says or does as long as it brings in business to the city." Wynn, though, has to watch that his ego doesn't interfere with all he has built.

A visionary named Bugsy Siegel once came to Las Vegas and got overextended in a hurry.

Wynn has shown time and again that he's a lot smarter than that. But he'll need to play his cards carefully to make sure his latest gamble pays off like the rest.

By Ronald Grover in Las Vegas





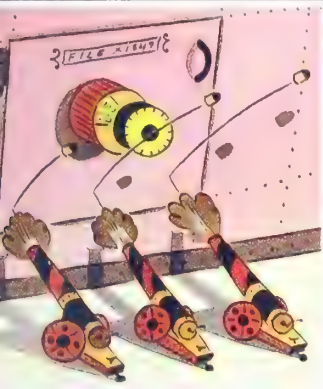
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Developments to Watch

BY SUNITA WADEKAR BHARGAVA

NEW STOPPER FOR STICKUP THIEVES: COMPUTERIZED LOCKS



The ongoing battle between those who make locks and those who crack them has lasted for centuries. Now, Mas-Hamilton Group, a lock-manufacturing company based in Lexington, Ky., hopes to confound safecrackers with its computer-controlled combination lock, the X-07. On top of the lock nestles a liquid-crystal display, and inside is a

processor. Spinning the dial powers a small generator produces electricity to operate the computer. Entering the correct code numbers on the LCD activates a lever that retracts the lock. The company claims the computer lock is designed to withstand all known forms of outside entry, including using an external computer to break the combination.

D. Hamilton, marketing vice-president at Mas-Hamilton, says the X-07 has 1 million combinations vs. the 300,000 for mechanical locks. He expects the \$679 lock to be used by federal agencies to store classified documents, as well as by banks, jewelers, and convenience stores.

HOW TO GET THE SLOPPINESS OUT OF CERAMICS

It's hard to make ceramics with very precise and accurate dimensions, because they ordinarily shrink after they have been fired. In addition, many ceramic-making processes use organic or other binding elements that must be burned off—causing environmental contamination. Blasch Precision Ceramics, Schenectady, N. Y., says it has overcome these problems with a simpler, low-pressure process that forms high-precision ceramic parts without machining.

To produce ceramics with very small pore size and uniformity, says Blasch President David Bobrek, the company uses special formulas that control the distribution of particles in the ceramic before it is fired. As a result, such ceramics have very low shrinkage rates of about 0.1% to 0.5%, compared to the typical 25% to 30% for ceramics such as zirconia. The ceramics are also able to withstand temperatures of up to 1000°F—several hundred degrees higher than other ceramics. Bobrek expects major uses for the materials to be in the metal industries, particularly for parts such as nozzles that come in contact with molten metals.

FIGHTING FIRE WITH . . . EUCALYPTUS OIL?

Water is fine for putting out most small fires. But something more effective is often needed against forest fires involving natural gas or phosphorus. A few fire departments are using a new additive that works eight times as fast as water alone and is more versatile than other fire suppressants. Pyrocap B-136, in foam form, blocks atmospheric oxygen from the fire. Its nitrogen-rich mixture also im-

proves the penetration of water and reacts with hydrocarbons in the fire to absorb heat rapidly. A combination of urea, eucalyptus oil, alfalfa, and other environmentally friendly ingredients, Pyrocap eliminates toxic smoke and some poisonous gases and leaves burned material cool to the touch.

Pyrocap's inventor, John States, says he got the idea from American Indian folklore about fires being put out with urea and other natural ingredients. The product has just been ordered by fire departments in Washington, D.C., Detroit, Compton, Calif., and Fairfax, Va., and has been approved by the Agriculture Dept. and the Forest Service to combat forest fires. Unified Industries Inc., in Springfield, Va., is marketing Pyrocap, which sells for \$35 a gallon.

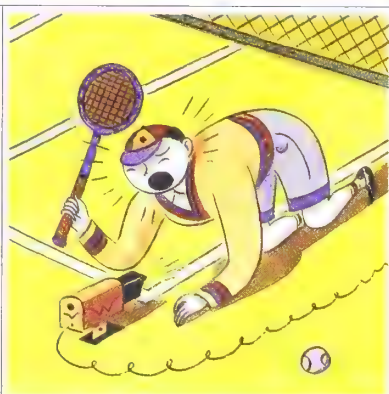
ALUMINUM MAY BE BAD NEWS FOR THE HUMAN BRAIN

First it was lead, then mercury. Now, it looks as if aluminum, a metal common in leafy vegetables, tea, and processed foods such as cream-filled cookies and nondairy creamers, may be a candidate for the list of toxic no-nos. Up to now, the Food & Drug Administration has regarded aluminum as generally safe to consume. But a new study from the University of California at Davis indicates that, just like its metallic cousins, aluminum may have a detrimental impact on brain function when it's ingested.

In the study reported in the journal *Toxicology & Applied Pharmacology*, mice fed aluminum-spiked food performed poorly on tests used as indicators of neurotoxic agents. Compared with normal mice, they showed lower grip strength, fewer startle responses to loud noises, and less general activity. Moreover, when the aluminum was ingested with citrate, a compound that binds readily with metals, the degenerative effects occurred sooner. This indicates that aluminum found in juices and wine coolers, all of which can contain citrate, may be more worrisome than aluminum contained in other foods.

LET'S GO TO THE VIDEOTAPE, MR. McENROE

Line disputes between players and judges are common at most tennis matches. To make such decisions strictly impartial, an Israeli software company, DSI of Givat Shmuel, a subsidiary of the U.S.-based DSSI, has developed an Automatic Line Officiating System. ALOS includes an array of video cameras that record the ball's position at any



point on the border of the court. The results are then visually displayed to officials and spectators—all within half a second. DSI President Samuel Fogel says that a commercial system, which he plans to lease, will be out within a year.

Line systems are not a new concept. Two alternative systems have already been developed in Australia and the U.S. A line system from Canada, Accu-Call, relies on an overlay of electronic circuitry around the court. However, these have not been adopted extensively for tennis tournaments. Fogel is marketing the ALOS system as a way to save big on officiating costs—and hoping it will catch on.

THE GENE DOCTORS ROLL UP THEIR SLEEVES

Instead of drugs, they'll give patients DNA to cure their diseases—and a lot sooner than most thought

When University of Michigan cardiologist Jeffrey M. Leiden plunged into gene therapy in 1989, he was one of a small number of dreamers venturing out of the mainstream. It was a seductive goal—curing disease by inserting genes, the strands of DNA whose biochemical codes govern all life. But tough scientific problems and looming regulatory hurdles made payoffs seem elusive. “Even two years ago, many people said that gene therapy was *Star Trek* stuff,” Leiden recalls.

Things have changed at warp speed. In the past few months, National Institutes of Health scientists have proven that DNA can successfully treat children with faulty immune systems. Seven other clinical trials are under way, with dozens more planned. In the lab, Leiden and

ed as the father of the field, expected gene doctoring to be limited largely to inherited disorders such as cystic fibrosis or hemophilia. These diseases arise when a faulty gene keeps the body from making one crucial protein—with hemophilia, for example, one that clots blood. More common illnesses, including cancer and heart disease, involve a complex interaction between several genes and the environment, says biologist and pediatrician Fred D. Ledley of the Baylor College of Medicine. Gene therapy for these was viewed as a much longer shot.

But now, researchers are identifying scores of new genes every year. At the current rate, they may know enough soon to treat dozens of maladies, either by counteracting “bad” genes, such as those that lead to colon cancer, or by

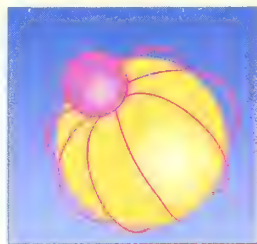
troversial conclusion: that gene therapy threatens the entire drug industry. Who takes drugs daily to lower cholesterol or control asthma if a single—or monthly—injection of a gene does the same or prevents the problem? “The big companies should be looking over their shoulders. Many of their products could be supplanted,” says Dr. Paul I. Nadler. Sandoz Pharmaceutical Corp.’s vice-president for scientific planning and evaluation. Sandoz has invested more than \$100 million in gene therapy and related technology, including a 60% stake in California startup Systemix Inc. Other drug giants are scouting for deals.

SAFETY FIRST. No one expects genetically tailored commercial products before 1996, but the field is moving fast. In the 1980s, proposals to do gene therapy in

THREE APPROACHES TO GENE THERAPY

DELIVERING GENES TO LUNGS TO CURE CYSTIC FIBROSIS

Because the altered cells eventually die, this method is temporary and requires periodic genetic therapy



Attach a copy of the corrective gene for cystic fibrosis to a harmless version of the virus that normally causes the common cold



Put the virus with corrective gene in liquid droplets. Drop these down a tube into the lung

other researchers are devising ingenious ways to slip DNA into the body to fight ailments ranging from AIDS and heart problems to cancer and Parkinson's disease. And in the past few years, a dozen or more gene-therapy companies have raised war chests totaling \$400 million-plus. “There has been an explosion in the science in the last two years,” says Max Link, CEO of Sandoz Pharma Ltd. “We are in the era of gene therapy.”

Proponents now see this as a far bigger boon for medicine than scientists once thought. Pioneers such as the NIH's Dr. W. French Anderson, who is regard-

enhancing “good” genes, such as those that keep arteries unclogged. Scientists even are turning gene therapy into a drug delivery system. In animal tests, they're using it to put growth hormone in the bloodstream, to deliver proteins that help the body wipe out tumors, and to insert genes that enable T-cells to resist deadly HIV, the virus that causes AIDS. “We are witnessing a flowering of gene therapy in terms not thought of before,” says Dr. Francis S. Collins, a molecular geneticist at the University of Michigan.

The progress leads boosters to a con-

the clinic were held up by endless questions from NIH and Food & Drug Administration reviewers over safety and ethics. Finally, in May, 1989, Anderson, along with two other NIH scientists, Dr. Steven A. Rosenberg and Dr. R. Michael Blaese, made history by inserting the first new gene into a person, a patient with the deadly skin cancer melanoma. The new DNA didn't combat the cancer; it was only a marker, charting the work of tumor-fighting cells.

Then, on Sept. 14, 1990, Anderson and colleagues at the NIH and Genetic Therapy Inc. (GTI) in Gaithersburg, Md., began

more ambitious experiment. They set out to treat a devastating inherited disease known as ADA deficiency, which is caused by a faulty gene that leaves victims unable to make a vital enzyme called adenosine deaminase. As a result, toxic substances accumulate in the blood, killing off lymphocytes, the front line of the immune system. Defenseless against germs, patients usually die in childhood.

CULTURAL BREAKTHROUGH. Anderson's experiment began by extracting T-cell lymphocytes from a 4-year-old ADA deficiency patient. They put a corrected version of the ADA gene into the cells' DNA, then reinserted the T-cells back into the girl's bloodstream. The corrected cells gradually died, so the procedure was repeated every month or so. Now, 18 months and more patient later, the NIH scientists are convinced that their strategy works. The girls are doing well, and one even played healthy when chicken pox swept through school. "We all held our breath," says Blaese. "It was an acid test of the experiment." It was also "a cultural breakthrough," says Anderson, who notes that much opposition on regulatory panels at the NIH and the FDA has evaporated. The NIH panel has now approved 17 gene-therapy trials.

One of these, the NIH's Rosenberg is injecting genes for tumor-attacking substances into the cancer-fighting cells, using to treat skin- and kidney-cancer patients. The first results are expect-

The virus infects cells lining the lung, carrying in the good gene. The cells then make the correct protein, alleviating the disease



Insert a gene that produces an essential protein into a plasmid, a ring of DNA



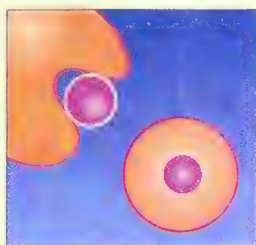
Inject the plasmid into any muscle, where cells then swallow the DNA



Muscle cells make insulin or other proteins whose instructions are contained in the gene. The protein goes into the bloodstream

INJECTING GENES TO FIGHT CANCER

This form of genetic therapy shows promise in treating many forms of cancer



the patient's immune system. Mix the gene with liposomes, or drops of fat, that surround the gene

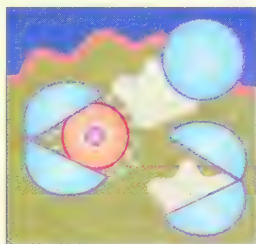


Start with a gene for an antigen—a type of protein that provokes a strong response from

Inject the gene-containing liposomes directly into a tumor



Some tumor cells swallow the liposomes. The cells then make the antigen



just the tumor cells that are making the antigen but other tumor cells as well

Killer T-cells, immune system cells that attack invaders, home in on the antigen. They kill not

DATA BW

ed this spring. In another trial, Dr. Malcolm K. Brenner of St. Jude Children's Research Hospital in Memphis is inserting marker genes into bone marrow cells during bone marrow transplants for leukemia. That way, he can tell if relapses are caused by cancer cells that survive eradication of the patients' own bone marrow or if leukemia is inadvertently reintroduced with the replacement marrow cells. Next, he plans to add genes that help fight the cancer.

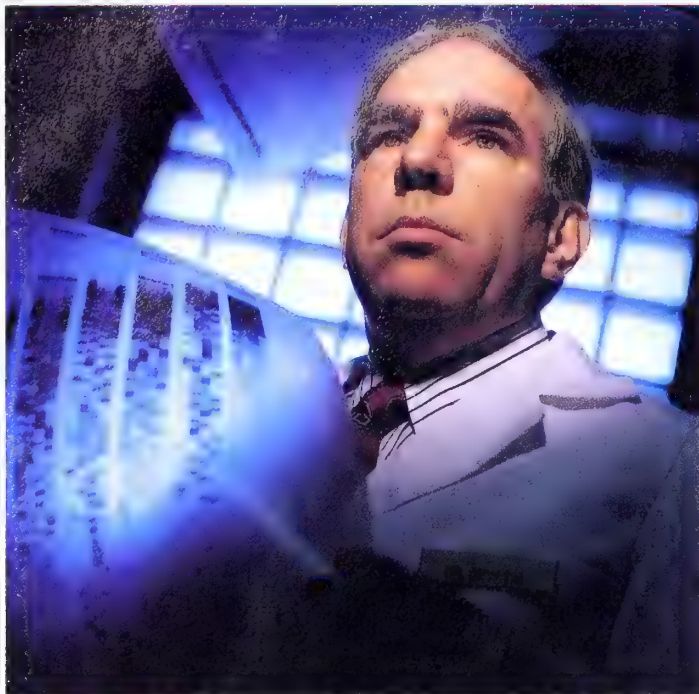
Bolder experiments lie just ahead. Dr. James M. Wilson, a geneticist at the University of Michigan, will soon use gene therapy to tackle an inherited disease called familial hypercholesterolemia. Victims lack a protein, the LDL receptor, that processes cholesterol. Blood cholesterol levels soar, and heart attacks often occur before age 10. Wilson will extract liver cells, put in the gene for the LDL receptor, then place the cells back in the liver. The hoped-for result: a decline in cholesterol levels.

VACCINE FACTORIES. At the NIH, meanwhile, Anderson's team is aiming for the crowning achievement: permanent cures. In place of periodic ADA therapy, Anderson wants to slip the curative gene into progenitor cells—factories that resupply blood with new cells. Then the gene would be continually produced. The trick is finding progenitor cells. Normally, they live in bone marrow. But a few are in the blood, and researchers at CellPro in Bothell, Wash., have devised a way to pluck them out. Once that's done, Anderson will insert new genes in them—and perhaps get them to return to the bone marrow and cure ADA.

Such trials are the tip of what's happening in scores of university and company labs. "It's a hot race, with big stakes as to which approaches get established first," says Paul Tolstoshev, GTI's vice-president for research. Much of the work centers on the delivery system for gene therapy. Today's clinical trials all use modified retroviruses—one type of virus—as gene taxis. These viruses have the ability to insert their own genes into the DNA of cells they infect. The job of gene doctors is to snip out genes that

TURNING THE BODY'S CELLS INTO MINIATURE DRUG FACTORIES

This method could be used to deliver insulin, growth hormone, vaccines, or wound-healing factors for months at a time



**DR. RONALD
CRYSTAL OF THE
NATIONAL HEART,
LUNG & BLOOD
INSTITUTE HOPES
TO TRY HIS GENE
THERAPY FOR
CYSTIC FIBROSIS
IN PEOPLE WITHIN
A YEAR**

make a retrovirus deadly and substitute therapeutic ones that the virus can insert elsewhere.

This process has its weaknesses, however. Retroviruses insert genes randomly into infected cells' DNA, raising a remote risk of disrupting the original genetic machinery enough to cause cancer or other problems. Retrovirus taxis can infect only dividing cells and so don't work for genetic therapy in the brain or lung, where cells either don't divide or do so slowly. And gene doctors typically must take cells out of the body to insert new genes with retroviruses. That's costly and time-consuming.

Now, alternatives are emerging. One is a delivery system using adenoviruses, which cause the common cold. These viruses can infect nondividing cells and don't insert their genes into the cells' DNA. While running one spring day in 1989, Dr. Ronald G. Crystal of the National Heart, Lung & Blood Institute saw how the viruses could help treat cystic fibrosis. Victims of the disease suffer from a dangerous buildup of mucus in the lungs because they lack a protein that channels vital substances through the walls of lung cells. Crystal has been able to insert the correct gene into crippled adenoviruses and deliver the tidy genetic package to rat lungs through a tube. The cells then make the key protein. Crystal aims to try the technique on people within a year if he can rule out dangerous side effects. "We know it's going to work," he says. "The question is if it's safe."

Viruses are only one delivery vehicle. Fat droplets known as liposomes also

seem to work. And geneticist Dr. Jon A. Wolff of the University of Wisconsin has discovered that muscle cells will swallow loops of DNA (illustration, page 79), a phenomenon being exploited by San Diego-based Vical Inc. to turn muscle cells into vaccine factories.

Most gene-therapy companies are looking for something even better: a vehicle that can be injected and go directly to its target. These would zip through the body like guided missiles, carrying new genes only to such tissues as liver or tumors that need them. Once these are perfected, suggests Dr. Albert B. Deisseroth of M.D. Anderson Cancer Center in Houston, gene therapy could become an inexpensive outpatient procedure. Test results are tantalizing. A system fashioned from DNA and protein by the University of Connecticut's Dr. George Yung-hsing Wu and Catherine

Wu, for example, has delivered genes to livers of rabbits, lowering their cholesterol levels. TargeTech Inc. in Meriden, Conn., aims to turn the idea into a commercial product.

Even gene therapy optimists are amazed by such progress. "Much of this work seemed like elegant molecular fantasies just a year ago," says Harvard University geneticist Jerome H. Groopman. Now, it looks as if it can be used to cure scourges of humanity. "The real opportunity is cancer," says Harry Hixson, chairman of Somatix Therapeutics Corp. in Alameda, Calif., and a former president of biotech powerhouse Amgen Inc. "Gene therapy can provide the basis for treatment and cure."

'SUICIDE GENE.' Witness the results that Massachusetts Institute of Technology geneticist Richard C. Mulligan and Johns Hopkins oncologist Drew M. Pardoll have gotten. They inserted into mouse tumors the genes for proteins such as interleukins, that boost the immune system. The idea is to make cells that normally attack the tumor more potent. Pardoll and Mulligan have shown that the immune systems of treated mice kill not only cancer cells that harbor the new gene but eliminate tumors elsewhere in their bodies. "We're very anxious to take this to the clinic," says Mulligan.

Also promising is "suicide gene" therapy. In one experiment, NIH scientists are inserting a gene into rats that makes brain tumors susceptible to ganciclovir, a common antiviral drug. "The preliminary results are exciting," reports the NIH's Blaese. "Most of the rats have complete elimination of the tumors." These strategies work in people, they could tackle cancer with few of the side

LEADING GENE THERAPY STARTUPS

Company	Dollars raised/Millions	Goal
SOMATIX THERAPY	\$69.0	Alter blood-vessel, skin, and muscle cells to treat hemophilia, cancer, and Parkinson's disease
GENETIC THERAPY	60.2	Alter blood and lung cells to treat hemophilia, cystic fibrosis, AIDS, and cancer
TRANSKARYOTIC THERAPIES	21.5	Insert genes into skin and other cells to treat hemophilia, diabetes, dwarfism
CELL GENESYS	15.4	Technology to precisely insert new genes in DNA. Engineering cells to fight cancer, AIDS, eye disease
VIAGENE	13.3	Vaccines and therapeutics for diseases such as AIDS
VICAL	8.4	Putting genes into muscle cells to make vaccines

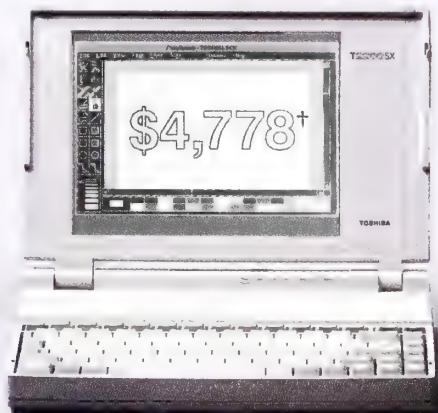
DATA: RECOMBINANT CAPITAL, BW

**RED
PURPLE
BLUE
VIOLET
GREEN
BEIGE
BROWN
BLACK
YELLOW
MAUVE
MAGENTA
PINK
ORANGE
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SIENNA
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**BLACK
WHITE
AND
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effects observed with current treatment.

Still, it's a big step from rats to people. At Memorial Sloan-Kettering Cancer Center in New York, molecular geneticist Eli Gilboa has been able to engineer T-cells to make them resist the virus that causes AIDS. "But it is still basic research," he says. "It is a big leap of faith to do it in a patient." And getting promising approaches to clinical work will be "like any drug development," says Paul Aebersold, who reviews research proposals at the FDA. Companies "will have to kiss a lot of toads before they find a prince," Aebersold says.

UNCONVINCED. Will gene therapy live up to its hype? Some biologists still believe that most diseases are too complex to treat this way. And there is still concern over safety—and gene therapy's commercial potential. Stelios Papadopoulos, managing director of PaineWebber Inc.'s health care group, says extracting and engineering cells to deliver new genes could be a low-margin service business, more like testing-lab work than drugmaking. "No one has convinced me they can make a business out of gene therapy," he adds.

Gene doctors retort that Wall Street doesn't understand the science. On safety, for instance, several researchers, including scientists at Targeted Genetics Inc. in Seattle, see a way to use suicide genes that can quickly abort a gene-therapy treatment that goes awry. Beyond that, some startups argue that there's no reason the specialized service they'll provide can't reap high margins. Others say they'll be selling drugs, not service. "Our product will be a gene-delivery system in a vial," predicts GTI's Tolstoshev—and a direct competitor to drugs in bottles.

Sandoz has taken the threat seriously enough to invest heavily in new genetic technology. Other companies are more wary, citing safety concerns and the uncertain path to commercialization. At Schering-Plough, for example, Francis J. Bullock, senior vice-president for research operations, thinks gene-therapy products—except those for single-gene diseases—will wait for the 21st century. "But the significance has not escaped us," he says. By the time gene therapy is ready for the bedside, adds Michael Steinmetz, head of biotech research at Hoffmann-LaRoche Inc., "the pharmaceutical companies will be involved."

Whoever commercializes the technology may bring powerful new treatments to medicine. At least, that's what the gene doctors think. Now, they've got to turn their experiments into concrete clinical gains—and prove that their work is more than grist for a *Star Trek* plot.

By John Carey in Washington and Joan Hamilton in San Francisco, with Gary McWilliams in Boston

Information Processing

PERSONAL COMPUTERS

THE PEN-PC MARKET IS MOVING HALF STEAM AHEAD

Software flaws and spotty demand aren't deterring rollouts

Nine months ago, Anthony Weir, a policeman in San Jose, Calif., was agog over a new type of personal computer that could recognize hand-printed words. In demonstrations, people simply scribbled on a computer screen with a special pen and, presto, it was translated into computerized text. "Everybody is going to use these," he gushed when he and his fellow officers started testing the newfangled machines to write up field and accident reports.

But today, just as computer makers are preparing these machines—called pen PCs, pentops, or tablets—for market, people such as Weir are no longer as gung-ho. They've found an annoying flaw: The software that recognizes handwriting isn't up to snuff for some jobs. Too often, it confuses a Z with a 2, or a U with a V—and so on. "When we have to write two-page narratives, the [lack of] accuracy can be painful," says Weir.

That means that San Jose cops—and lots of other potential customers—may not be buying as many machines as computer makers had expected. But it doesn't mean that a market for pen PCs isn't taking shape. In fact, the pentop business is beginning to take off—albeit at about half the speed boosters originally figured. This spring major players such as IBM are launching pen PCs (tablets) that are aimed at a promising sliver of potential customers, rather than at a mass market. The target: workers such as nurses, sales reps, real estate agents, and insurance adjusters who are on their feet or away from the office much of the day and can't easily use desktop or laptop machines. "This is for the lapless worker," says Kathy Vieth, vice-president for tablet systems at IBM.

TRAVELING REPS. And there are a lot of lapless workers. Pensoft Corp., a software startup, figures there are 30 million of these on-the-go workers in the U.S. Analysts at Prudential Securities Inc. estimate that \$1 billion worth of pen PCs could be sold to traveling sales reps each



year, and health care workers could snap up an additional \$500 million worth.

That adds up to a healthy market, but not the bonanza that computer makers and analysts predicted a year ago. Limitations in pen technology, and production delays, have prompted market researcher Dataquest Inc. to slash projections for the 1992 pen-PC market by more than 40%, to 200,000 units, or about 10% of the portable-computer market. It also cut its 1995 forecast by about 25%, but still sees a formidable market there: 1 million units annually and revenue of \$10 billion. Forrester Research Inc. of Cambridge, Mass., is more pessimistic,

predicting sales of just 75,000 pen PCs this year—half its estimate of a year ago.

State Farm Mutual Automobile Insurance Co. is typical of early pen-PC customers. Its field agents have tested pentops for 18 months, using them to fill

**FOR THE TROUBLED
PERSONAL-COMPUTER
INDUSTRY, PEN PCs
REPRESENT A FRESH
GROWTH OPPORTUNITY**

ronic forms, make short notes, and route repair costs on damaged cars," Norman L. Vincent, vice-president of data processing at the insurer. Now, the company is considering buying as many as 15,000 units over the next two or three years. Still, in their current state, pen PCs won't hack it in State Dept.'s executive offices. People who use pentops are ready for general office use, says Vincent, "have got their feet in the clouds."

Putting pen PCs onto office desks and into the computing mainstream will re-

least 10 brands of pen PCs will be available, many of which will use new operating systems, or basic control programs: PenPoint from GO Corp. and Windows for Pens from Microsoft Corp. Both recognize hand printing traced on a liquid-crystal display screen and translate it into computer text. GO has spent four years and about \$30 million writing its program, while Microsoft has spent three years and \$15 million.

Suddenly, GRiD Systems Corp., the Tandy Corp. subsidiary that pioneered the market and had the field to itself for

with machines from Poqet Computer Corp. and PI Systems Corp., priced at \$1,995 and \$1,895, respectively.

Walter stuck with the higher price because he thinks his product has an edge. The 2.8-pound PalmPad is specifically designed for workers who spend their days in the great outdoors. Encased in the same plastic used for cameras, the PalmPad may be just the ticket for meter maids and truck drivers who would need a machine that could survive being roughed up a bit. "We have dedicated our entire company to pen PCs," says



GRID SYSTEMS' WALTER: TAKING HIS PALMPAD OUT ON THE WAVES

major improvements in handwriting recognition software. Already, says Harold Kaplan, chairman of pentop software pioneer GO Corp., the accuracy of its PenPoint software has risen to 93%, from 85% just six months ago. Even so, 1 in every 15 characters can be misread by the computer. "It's like every other phone number you dial is a wrong number," says Vern Larn, president of pentop software maker Slate Corp.

Programmers concede that 100% accuracy is an impossible target. And, Kaplan asserts, it's myopic to focus on it. The vision goes beyond PCs that read handwriting to a concept called "living documents"—using pentops to capture notes scribbled in the margins or to sketch a product. These digitized images can be shared on PC networks.

Even if software limitations hold back the pen-PC market, the new machines represent a refreshing growth opportunity in the troubled personal-computer industry. That's why so many PC makers are jumping in. By summer, at

two years, will be feeling some competition. The company plowed \$50 million into developing GridPad, a 5-pound pen PC that sells for \$3,000 to \$4,500 but has sold only about 20,000 units. Now, GRiD will be surrounded. NCR Corp., which introduced a pen PC last June, has started shipments, and startup Momena Corp. says its pentop is available in 200 computer stores. And after the rash of products this spring, heavyweights such as Compaq, Dell, and Zenith Data Systems plan to jump in by yearend.

PRICE CUTS. Already, the market shows signs of overcrowding and discounting: Just out of the starting gate, NEC plans to drop its price in April from \$4,099 to \$3,599, and Momena is offering customers \$1,000 off its \$4,995 pen PCs. "I suspect we're going to see price erosion in the next few months," says Bruce Langos, NCR's director of strategic product planning. Indeed, a week before the planned announcement of GRiD's latest pen PC, company executives were pressing President D. Bruce Walter to cut the price from \$2,895 to \$2,000 to compete

Walter. "We think it's going to be big."

Lightweights such as PenPad and Poqet are only a hint of the compact second- and third-generation pen PCs now on the drawing boards. Most of this year's models look and act much like notebook PCs. But within 18 months, pen PCs are expected to shrink to the size of a steno pad, a 5-by-8-inch computer weighing 2 pounds to 3 pounds. The expected price for these scaled-down models: \$500. And by 1994, pen PCs could be pocket size. These would be used as personal organizers for jotting down phone numbers and appointments. They would also do simple calculations using numbers and commands written on the screen. Future models may even have wireless communications links.

So, for all their flaws, the products coming out now do represent a beginning. "It's showtime for pen computing," says GO's Kaplan. Early reviews may be mixed, but pen-based computing could still shape up as one of the industry's long-running acts.

By Kathy Rebello in San Francisco

PEN PCs: THE SPRING LINEUP

Company	Product/Price if known	Available
HARDWARE		
NEC	UltraLite/\$4,099	Mar. 20
PI SYSTEMS	Infalio/\$1,895	Mar. 31
GRiD	PalmPad/\$2,895	April
IBM	Code name 'Whitestone'	May
SAMSUNG	PenMaster/Under \$5,000	June
SOFTWARE		
MICROSOFT	Windows for Pens operating system	Apr. 6
GO CORP.	PenPoint operating system	Mid-April
SLATE	Spreadsheet for pen PCs called At-Hand/\$295 Day-Timer Pen Scheduler/\$195	May
PENSOFT	Perspective, personal organizer/\$299	May

SOURCE: IDC

THE REWARD OF MANY RISCs

The continued lack of an industry standard may boost competition

On paper, it seemed like a good idea: Take the business model that developed around the IBM PC—hundreds of companies building gear to the same standard specifications—and extend it to the rest of the industry. Buyers of all sizes of computers would enjoy lower prices, and computer makers could stop sweating about gaining a fleeting advantage in hardware. Instead, they could focus on creating better software for customers. Starting with workstation giant Sun Microsystems Inc. in 1990, computer makers began proffering their high-performance RISC (reduced instruction-set computing) chips as the basis for a new standard to supplant the aging PC, based on Intel Corp. chips.

No RISC chip has established itself as a standard, however, and now it's unlikely one ever will. But that could be the best news computer makers have had in a long time. While the PC standard was great for customers, it hurt computer makers by turning hardware into an undifferentiated commodity, leading to price wars and slim profits. Indeed, the companies reaping the best profits in the PC business these days are the two near-monopoly suppliers of basic PC technology—chipmaker Intel and software maker Microsoft Corp. A RISC standard might have undermined the Intel and Microsoft strongholds, but it also would have created more commodity markets in workstations and larger systems.

TOO AGGRESSIVE? Until recently, it looked as though the market for workstations would follow the PC-industry pattern. Sun pushed hard for clones. But it was too aggressive a competitor for top computer makers to feel comfortable cloning its SPARC design. Competitive considerations also limited clones of IBM and Hewlett-Packard Co. designs. Motorola Inc., No. 2 supplier in conventional microchips (table), didn't build much of a following for its RISC chips. That left MIPS Computer Systems Inc., whose tiny

computer business made it seem neutral, to challenge Intel. Some 20 companies, including Digital Equipment Corp. and Compaq Computer Corp., launched the Advanced Computing Environment consortium to set a standard around MIPS's RISC chips. But lately, key members of ACE, such as DEC and Compaq, began wavering (BW—Feb. 17). And on Mar. 12, MIPS lost its neutrality when it agreed to a buyout by workstation maker Silicon Graphics Inc.

"We joined ACE with the hope of a

Italian computer maker Olivetti & Co. says the computer market could be more like it was pre-PC. Selling hardware that offers an advantage over the competition should lead to "higher prices and higher profits."

That's not to say that the battered computer industry is back on easy street. Proprietary software—the hook that big computer makers traditionally used to keep customers tied to hardware—carrying 60% and 70% gross margins—will probably never make a comeback. But, Piol says, anything above the money-losing 30% margins of today's PC clone market "can be significant." One limitation on margins will be quasi-standard software such as American Telephone & Telegraph Co.'s Unix and Microsoft's Windows NT, which will run on many brands of computers—as will applications packages such as data base. Industry standards for communication will help smooth over the differences among brands. Still, customers won't be able to simply move software from one brand to another as they do with PCs.

CLEAR WINNER. Ultimately, the RISC field will narrow. "The market will not support five players," insists Stephen C. Dube, a computer analyst at Sherwood Securities Corp. Established computer makers, such as IBM, DEC, and HP have the best odds of seeing their RISC designs survive over the long haul, he says. Although Sun remains the largest shipper of RISC-based computers, its rivals are signing up major players to their RISC teams. IBM has Apple Computer Inc. and France's Groupe Bull, for instance, while DEC has recruited Japan's Kyocera Corp. and Cray Research Inc. Sun has cultivated clonemakers, but it ships 90% of all SPARC-based machines itself and now seems to be hedging. It's adapting its software to run on Intel 486 chip.

The clear winner after all this: Intel. Its dominance of the chip market remains intact—last year, it sold

20 million chips for computers that list for \$25,000 or less, vs. just 308,000 RISC chips for such machines. RISC technology has pressed Intel into upping PC performance faster than ever, making it harder to persuade commercial customers to switch to RISC-powered machines. And for now, that's only helping Intel laugh even harder on its way to the bank.

By Gary McWilliams in Boston, with Jonathan B. Levine in Paris



recreation of the PC phenomenon," says George P. White, CEO of Corollary Inc., a computer maker. "It doesn't look like that's going to happen." But with no dominant RISC standard in place, IBM, HP, DEC, Sun, and perhaps even the Silicon Graphics-MIPS-ACE gang may get to enjoy higher gross margins—at least for a while. Elserino Piol, strategy chief at

EDI

In Action



How Private Business & the Federal Government are Making EDI an Integral Part of their Business

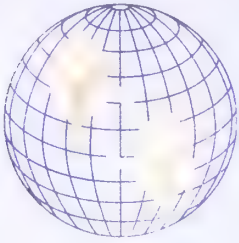
Despite some notable achievements, Electronic Data Interchange (EDI) is still in its fledgling stage. For a variety of reasons, having to do with inertia, politics and economics, this electronic method of exchanging business information has not been an instant success.

But recently, impressive EDI applications, both in the public and private sector, have given added impetus to the concept. Although the private sector has no shortage of EDI converts, more often than not today's most vocal and influential missionaries are likely to be wearing uniforms or hold a high level civil service rank.

The Federal Government—in particular the U.S. Customs Service and the Department of Defense—is leading the way to, what they call Electronic Commerce.

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WHAT IS EDI?

Electronic Data Interchange (EDI) is commonly defined as the computer-to-computer exchange of business documents between organizations in a standard electronic format. However, as EDI spreads throughout industry and, in particular, agencies of the federal government, the concept is broadening in scope.

Electronic Commerce (EC) is the term now being used by some federal agencies to describe the integration of EDI into the organization's business systems.

Your Tax Dollars at Work

"When it comes to EDI and the federal government, we're seeing a good return on our tax dollars," commented Greg Harter, President and CEO of the Electronic Data Interchange Association.

EDIA, is helping to bring about the adoption of standards and raise EDI awareness in the private government sectors.

"There is a real awakening on the part of government," Harter continued. "In the past, when it came to automating their business practices, the government often lagged behind the private sector. But, several years ago, when the agencies saw how effective EDI could be when integrated with the enterprise's internal systems to streamline business processes, they moved quickly.

"When it comes to EDI and the federal government, we're seeing a good return on our tax dollars."

Greg Harter, President and CEO of the Electronic Data Interchange Association

The result is that the federal government has become a leader in the broadened concept they call Electronic Commerce."

The U.S. Customs Service is a case in point. William F. Riley, the Service's assistant commissioner for information management, explained that companies wishing to import goods into the U.S. must first file for a release of their merchandise and then, 10 days later, follow up by requesting formal entry.

"We have nine million formal entries filed a year," he said, "with seven to 10 documents associated with each entry. Ninety percent of these documents are now being handled electronically."

Customs' answer is the Automated Commercial System (ACS) which has been in development since 1982. The joint public-private sector computerized data processing and telecommunications system links Customs' computers with customs houses, members of the import trade community, and other government agencies. Trade users file import data required by Customs and other agencies electronically. They are able to receive critical information on cargo status, and can query Customs' electronic files.

ACS's EDI component, the Automated Broker Interface (ABI), is used for entry declarations and associated transactions. An Automated Manifest System (AMS) is used for air and sea manifests.

Using the system at any given time will be a mix of customs brokers, importers, ocean carriers, air lines, deconsolidators and forwarders, air couriers and port authorities. Also part of the system are EDI brokers, service bureaus who translate user information into EDI compatible form.

A recent and highly successful EC application at Customs is electronic funds transfer (EFTS). "We went on-line with EFTS just last year," Riley said, "and

already we are collecting 40% of our duties electronically. We are processing \$30 million a day and have found it to be an excellent system for cash management and controlling deposits."

"In 1980, we rejected one in six customs applications because of errors," Riley recalls. "Today, because of ACS we reject an average of one in 52."

A recent survey of Customs' ABI users found that 82% perceived ABI participation to be a competitive advantage. Employee productivity has improved for 81% of the firms responding and 48% credit ABI with increasing their customer base. Obviously, for Customs and its customers, EDI is here to stay.

EDI on the High Seas

Occasionally, among the routine transactions that appear on the screens of the U.S. Customs Service terminals, an exotic name will appear—Tristan, Isolde, Carmen, Figaro or Madam Butterfly.

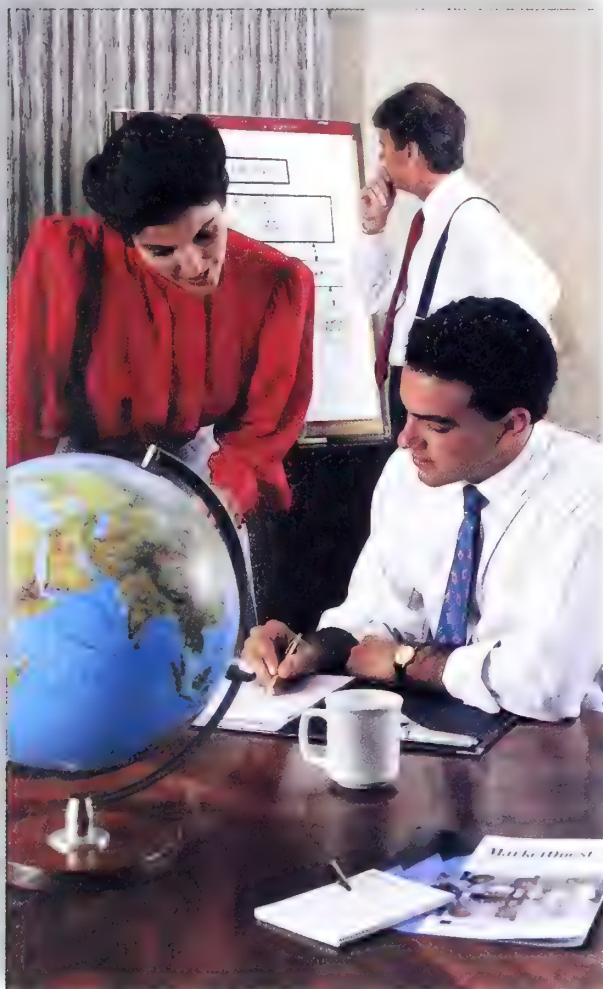
The late Olof Wallenius brought his love of music to his business. Wallenius Lines is the global shipping company headquartered in Stockholm. Often referred to as the "Opera Line," the majority of Wallenius' 30 ocean-going vessels are named after famous operas.

The 58-year old company transports cars, trucks, heavy construction equipment, boats and anything else that rolls to and from ports around the world.

Wallenius Lines is innovative on land as well as at sea. Raymond P. Ebeling, President, Wallenius Lines, North America, has been the driving force behind introducing EDI to the U.S. subsidiary of the company.

Aware that the Big Three auto manufacturers have been moving to EDI based systems for more than eight years, Ebeling decided that it would be highly advantageous for Wallenius to follow suite. Nearly three years ago, he began

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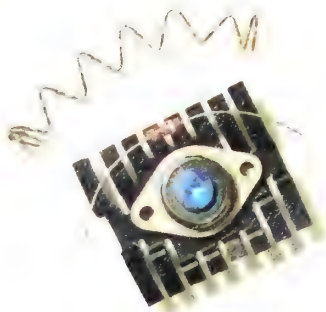


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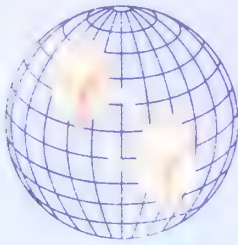
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to transform Wallenius, North America, from paper-based systems to the latest electronic techniques to communicate with its trading partners and government agencies and to optimize its internal operations.

"Take General Motors, for example," said Ebeling. "They want to develop an integrated electronic system that includes all their suppliers and covers every aspect of their business from the factory until the time the cars are delivered to the dealers. They recognize, as we do, that EDI lets you avoid the paper shuffle, encourages attention to detail, and provides a high degree of accuracy. Any one of their trading partners who is not part of the EDI network creates a break in the system."

Robert Crowley, president, CW Consultants, commented that "Wallenius is going about adopting EDI the right way." Crowley, currently working on the car carrier's EDI conversion, is a veteran of both the shipping and EDI worlds.

"Wallenius," he said, "decided to re-engineer their business as well as introduce EDI. They are making a quantum leap from their old processes and are becoming one of the most modern steamship companies in the world. All their internal systems are integrated, feeding into each other. This integration is essential for successful EDI."

"I think one of the key reasons that the introduction of EDI at Wallenius is going so well is that Ray Ebeling, the top man, made the initial decision and has been behind the project all the way."

According to Crowley, EDI allowed Wallenius to cut costs associated with processing paperwork by 40%.

"You must remember," he said, "that EDI costs and return on investment work on a bell curve. Costs can double in the first six months of installation because you are running parallel systems — the old paper system and the new electronic

"I think one of the key reasons that the introduction of EDI at Wallenius is going so well is that Ray Ebeling, the top man, made the initial decision and has been behind the project all the way."

Robert Crowley, President, CW Consultants

one. But once the EDI systems are in place and you make the cut over, costs drop like falling off a precipice."

Role Reversal at Baxter Healthcare

Wallenius voluntarily introduced EDI, but often smaller companies have EDI forced upon them by their larger customers. But the Baxter Healthcare Corporation took a different tack — instead of being forced into EDI by its customers, it lead the way and made them into converts.

Baxter acts as both a manufacturer and distributor of health care supplies. Its customers are hospitals, HMOs and other health care providers.

Baxter's evolutionary path to EDI began with IBM punched cards and rudimentary telephone hookups and led to the company's present sophisticated ASAP® system (Analytic Systems Automated Purchasing).

Rachel Foerster, ASAP/EDI market manager for Baxter, noted that the company's top management has been committed to EDI from the very first. "Without that commitment," she said, "it is extremely difficult to implement EDI as a tactical tool that permeates the organization."

Baxter's commitment to EDI is reflected in a recent \$2 million expenditure to upgrade systems installed in the 1980s. The result is a new corporate EDI utility that supports customers and suppliers and is fully integrated into Baxter's internal information processing systems.

Baxter has teamed up with General Electric Information Services (GEIS) to provide a national telecommunications network for its ASAP users. GEIS also acts as a clearing house and electronic translator for hospitals using ASAP to place EDI messages with vendors other

than Baxter. Today more than 200 customers are using ASAP Express, the latest version of the EDI system.

At the Center of the Web

Where there are businesses, there are banks. And the First National Bank of Chicago — which, over a dozen years ago, decided that the combination of EDI and EFTS was their future — is now a leader in global electronic commerce.

First Chicago's involvement with EDI came from turning a threat into an opportunity. Twelve years ago, many banks considered EDI dangerous — foretold the end of the paper check. Suppose, speculated First Chicago's General Motor's signed up with a value added network (VAN) which handled all GM's payments electronically and which, at the end of the day, presented First Chicago with a single piece of paper covering all of GM's withdrawals and deposits. There went the bank's access to the payment system and a huge chunk of revenue.

In fact it almost happened. In 1983 GM sent out an RFP to convert its vendor payments to EFTS. That action shifted First Chicago into overdrive and directly into the world of EDI.

"Some of GM's vendors saw the RFP as a threat. We saw it as an opportunity," recalls Christopher Wagner, a senior VP and product marketing manager at First Chicago. "We viewed EDI as an ideal way to make our mark on the payments system. And we won the contract."

From that beginning, which merged EDI with EFTS, First Chicago has gathered an impressive roster of 400 EDI customers from around the world.

"Financial services, including EDI and EFTS, have become First Chicago's biggest revenue producer," Wagner said.

EDI at NCR

Five years ago when NCR installed its first EDI system, like many pioneers, it started off on the wrong foot. Rather than examining and modifying its inter-business procedures, the NCR team simply installed UNIX-based terminals and processors equipped with translation software and began sending out purchase orders electronically.

"We were able to send bad information a lot faster," commented NCR's Charles H. Slocum, project manager for manufacturing and technology.

Realizing their error, NCR formed a task force composed of members from several of its manufacturing plants. They reviewed their business processes from the bottom up.

On February 18 and 19, 1992, at the NCR Engineering and Manufacturing Summit in Atlanta, the results of NCR's efforts were announced when the company unveiled the Just In Time (JIT) manufacturing portion of its Future Manufacturing Systems program. At the heart of the program is a JIT Shop Floor System (JSF) and a Materials Acquisition Management System (MAMS). JSF and MAMS provide the company's plants with the capability to link material acquisition, management and consumption to true customer demand.

It is EDI that will allow NCR to produce top-quality products to its customers in record time. The consulting firm of Arthur Andersen is helping NCR fine-tune its project management techniques, and American Business Computer provides the X.12 and EDIFACT compatible translation software. Fully 60% of NCR's business is overseas, and adherence to the international EDIFACT standard is a must.

"By combining EDI and JIT, we will realize our primary objective — that of satisfying our customers," Slocum said.

EDI and DoD

Although EDI advances made by private companies are impressive, they are dwarfed by the U.S. government.

A case in point is DoD's Defense Personnel Support Center (DPSC) in Philadelphia. One of six centers worldwide, the Philadelphia DPSC has been chosen as DoD's demonstration center for electronic commerce.

DPSC purchases food, clothing, textiles and medical supplies in huge amounts, a \$4 billion annual business.

DPSC buys its supplies from a vendor base that numbers close to 100,000. "We're state-of-the-art," claims Robert L. Molino, executive director for acquisition management at the Center, "probably the leading implementer of EDI in the federal government."

Over the past five years DPSC has evolved a system which allows any supplier with a computer — be it a mainframe, mini or a PC — to access their EC network and become a trading partner. As DPSC trading partners, the suppliers are also linked with DPSC's "customers," — the mess halls, commissaries, hospitals, etc. DPSC is able to forecast demand based on actual usage, thus eliminating much of the need for huge contingency inventories languishing in the depots.

"We are committed to the necessity of going beyond EDI to electronic commerce," Molino said. "EC involves all our internal business procedures as well as the external exchange of electronic documents and payments between DPSC and our trading partners. This far broader concept will be the exclusive way to do business in the future."

Among the EDI advances that DPSC has instituted is a unique system that automatically solicits and accepts bids and awards the contract without human intervention.

Molino and his team have looked

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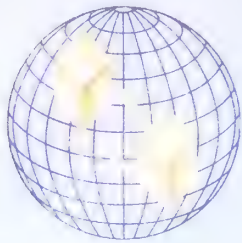
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"We viewed EDI as an ideal way to make our mark on the payments system. And we won the contract."

Christopher Wagner, Senior VP & Product Marketing Manager at First Chicago

with interest at the concepts of Quick Response (QR) which have been promoted most strongly in the retail industry. QR, combined with EDI, has allowed DPSC to make drastic cuts in depot inventory.

DPSC has earned their EDI stripes literally under the gun. This was the Center that supplied Desert Storm, expending over \$2.6 billion. "We went from a peacetime purchaser to a combat supplier in one day," Molino recalls. "We tapped into a global market and it worked very well. This was an excellent lesson for future military planning in the use of Quick Response," Molino said.

"DPSC is an example of how the

bureaucracy is changing," he added. "It's a matter of survival. We live the words of Total Quality Management and that means customer satisfaction comes first."

EDI or Die

As Gene A. Nelson, Principal, EDI at Cincinnati Bell Information Systems, wrote in the 1991 *EDI Journal*, "Increasing numbers of business in the 1990s will be faced with an ultimatum: adopt Electronic Data Interchange or suffer the effects of a disorganized, inefficient environment. In other words, EDI or D.I.E.!"

It is clear that as the government conducts more and more of its business using computers and global networks those organizations that are not now embracing EDI will have to become involved. Just one good look at what Customs, DoD and other government agencies are doing should convince even the most reluctant.

The handwriting is on the wall. And it reads, EDI or die.

This article was prepared in cooperation with the Electronic Data Interchange Association located at 225 Reinekers Lane, Suite 550, Alexandria, VA 22314, (703) 838-8041. The text was prepared by John L. Kirkley, president of Kirkley Communications.

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Commentary/by Troy Segal

BETTER SCHOOLS, NOT JUST MORE SCHOOL

The more children study, the more they learn, right? It's a concept whose appeal lies in its simplicity. Perhaps that's why extending the school day or year to boost students' achievement is all over the news right now. In February, New York City's chancellor proposed adding an extra hour to the day at 100 middle schools (estimated cost: \$50 million). In the past two years, 17 states have initiated legislation to lengthen the school calendar. Congress is about to appoint a 15-member National Commission on Education & Learning to study the subject.

More school seems to be an obvious remedy for the mediocrity that characterizes American education, a mediocrity that hampers America's ability to compete in a global economy. Children in almost every other industrialized nation attend school longer than U.S. kids do—especially the youth of the economic rivals: Japanese kids go 240 days, Germans, 210 days. The U.S. school year, by contrast, is only 180 days. Small wonder, advocates say, that foreigners routinely outperform the U.S., especially in math and science (table).

CUTBACKS. But extending the calendar is not an optimal solution. It's expensive: If a school system added 20

days to the calendar, it would increase achievement by 10%," says Chris Pipho of the Education Commission of the States. If a child doesn't learn in a five-hour day, why would he learn in six? Just adding an hour would simply bore kids and exhaust teachers, many educators say.

Instead, there are ways to improve schools at little extra cost. The problem may not be the length of the academic year but the way it is organized. The long summer vacation, which arose when America was a farming nation, serves little economic need today but

a better way, because kids have less time to forget," says Principal Carol Carroll.

Less time to forget often means higher achievement. The San Diego district, which began a nine-week/three-week calendar in some schools 19 years ago, compared standardized test scores of its year-round schools and traditional schools from 1984 to 1990. Year-round schools outperformed conventional ones in every subject at every level. Third-grade math scores, for example, rose 10%, vs. 3%.

As for the school day itself, it can be made more efficient without increasing its length, which is already on a par with other countries'. University of Michigan Professor Harold Stevenson, co-author of *The Learning Gap*, a new book that compares Asian and U.S. school systems, notes Japanese classes are more intense, but the lunches and recesses are more leisurely—a system, he says, that enhances student productivity.

CHANGES. Other educators suggest revamping the curriculum away from the lockstep 45 minutes per subject. At Model High School in Bloomfield Hills, Mich., "we've simply altered the way you structure the day," says Cindy Boughner, in charge of

the program. Classes are arranged in 2½-hour interdisciplinary blocks. In one block on *The Mind*, students read a psychological novel (English), examine how the brain works (biology), and research how background influences values (social studies).

Eventually, it may prove necessary to extend the academic day or year to accomplish some of these reforms. But quality of time, not quantity of time, should be the underlying motive. American children deserve real changes in the way they're taught—not just more of what isn't working.

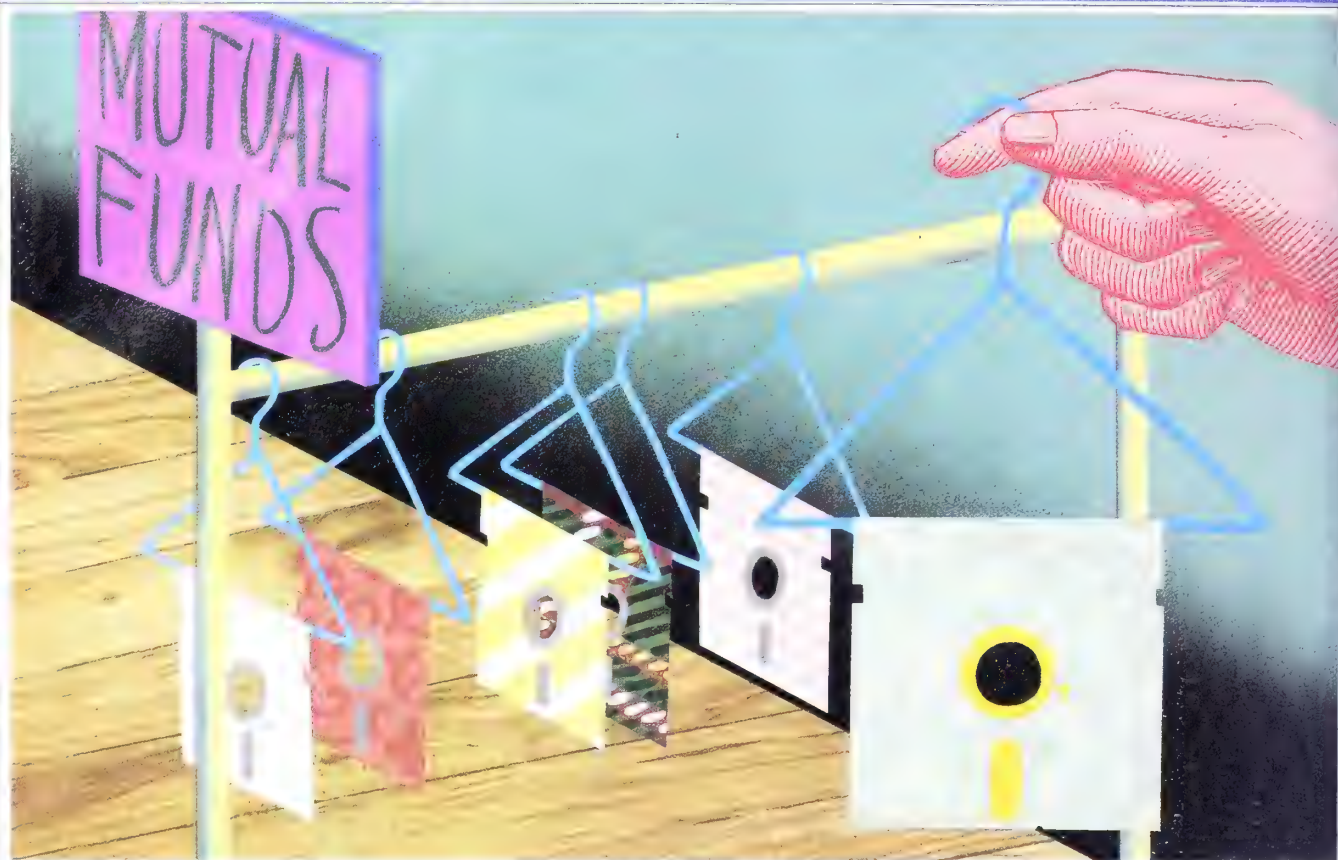


does much academic harm: Kids forget during the long summer break, so teachers spend up to six weeks reviewing in the fall.

Some 1,600 schools around the U.S. have developed a year with shorter, more staggered vacations. Park View Elementary in Mooresville, N.C., is a typical example. The school, which received a \$534,000 grant from RJR Nabisco Inc. in 1990, has a year-round calendar of 180 days—the U.S. average—but divided into quarters of nine weeks on and three weeks off, with a week spent on testing in between. "It's

or 10% to the year, its budget would increase by roughly 9.9%, estimates Allan Odden, professor at the University of Southern California's school of education. The main cost would be teachers' pay, already two-thirds of most academic budgets. Such expenditures are hard to justify when the finances are strapped. This year, budget cutbacks caused Florida to discontinue a "seventh period" program in high schools. That saved \$52 million in Duval County alone.

Of course, no price is too high to improve kids' minds. "But it's difficult



EDITED BY AMY DUNKIN

Software

YOUR PC CAN FIND THE FUND THAT FITS YOU BEST

For many people, mutual funds have become the only way to play the markets. But if picking a mutual fund was supposed to simplify investing, that hasn't been the case. The complexities of comparing returns, fees, and other features can leave even the most meticulous investors unsure if they've made the right choices. One way to sort it all out is with the help of your personal computer.

Software producers have seized upon the mutual-fund boom by developing an array of programs for small investors (table). Most are designed to help climb the first hurdle: selecting the right fund.

Either of two disk-based programs should serve most well: Rugg & Steele's Mutual Fund Selector or BUSINESS WEEK's own Mutual Fund Scoreboard. For both, users can purchase a pair of disks containing performance data on more than 2,300 equity and bond funds, and they can subscribe to monthly or quarterly updates. Want a growth and income fund that doesn't levy a sales load, charges management fees below 0.8%, and beat the Standard & Poor's 500-stock index over the past 12 months? In seconds, these programs winnow their data bases down to just five funds.

The BUSINESS WEEK Scoreboard disks, which employ the same format as the maga-

zine's annual fund tables, base their evaluations on a combination of any 9 of 26 variables. They include BUSINESS WEEK's rating scale for measuring "risk-based performance," which compares performance against the S&P 500, adjusted for risk.

BEAR HUNT. The Rugg & Steele program offers several features not found on the BUSINESS WEEK disks, including the ability to screen simultaneously any 20 of its 51 variables. The program provides seven ratios measuring how much risk each fund takes to generate its returns, compared with BUSINESS WEEK's single ratio. Rugg & Steele's disks also include separate listings for 12(b)-1 mar-

keting fees, as well as a graph listing annual returns for each of the last 10 years. The last feature should help investors gauge how funds did not just during bull markets such as 1991 but also in the bear markets of the early 1980s.

Two more comprehensive programs with mutual-fund data are WealthBuilder and Prodigy. But the Cadillac mutual-fund software is new offering from Morningstar employing the latest technology—CD-ROM. Morningstar Mutual Funds OnDisk squeezes an exhaustive supply of data on more than 2,200 funds—enough to fill 972 floppy disks—onto a CD-ROM disk. At \$495 for quarterly updates or \$295 for a single disk, t

am isn't cheap. CD-ROMs require a special player, can be purchased for as as \$300. But the Mornr program contains a h of information not ble elsewhere: a com-list of each fund's hold—including all 1,200 bonds n the Franklin California ree Income Fund, and l performance statistics as far back as 1976. lget-minded investors hoose from several less sive programs. The best in may come from the ofit American Associa-f Individual Investors in go, which offers quar-disks ranking 560 no-w-load funds.

CITY. So you've select-fund. If you're the buy-old type, your task is But if you're among the ng number of investors ry to time buy and sell s in advance of major et turns, you might ben-rom a technical-analysis am written expressly mutual-fund trading. o technical programs de-primarily to stocks—Stock (801 265-8886) and

you thought agile Ger-an sport sedans only me with BMW and Mer-badges, check again. edesigned Audi 100 is a ntly alternative that sells housands less than a arable Bimmer or Benz. it matches the perfor-e of similarly priced Jap-cars such as the Acura d and Lexus ES300.

heart of the new Audi a potent V-6 engine. Its orsepower packs 30% wallop than the five-cyl-engine that made the 0 so sluggish. That, cou-with an optional, smooth-ing four-speed automatic, s this big Audi feel r and more nimble than edecessor, even though 0 pounds heavier.

CAR. Handling is much ved, too. Even in sudden uvers, the new 100 feels d and balanced. Thanks nt-wheel drive, the Audi efooted on snow or rain-pavement. BMWs and

A REVIEW OF MUTUAL-FUND SOFTWARE

Program	Cost	Demo?	Features
MORNINGSTAR MUTUAL FUNDS ONDISC 312 427-1985	\$495*	Yes	2,200 funds; CD-ROM disk provides exhaustive data base: 152 data points per fund, including monthly performance for some dating to 1976
RUGG & STEELE 310 914-1731	\$299*	Yes	2,500 funds; best measurements of how much risk each fund takes to achieve returns. Also includes annual returns for each of last 10 years
BUSINESS WEEK MUTUAL FUND SCOREBOARD 800 553-3575	\$299*	Yes	2,355 funds; lists each fund's biggest single hold-ing; includes BW's proprietary risk-rating system
WEALTHBUILDER 215 387-6055	\$170/ \$120**	Yes	1,200 funds; financial-planning program offers quarterly updates to its mutual-fund data base
PRODIGY 800 776-0834	\$14.95/mo. plus \$12.95 standard charge	No	2,500 funds; strategic Investor option does simple screening. Service also allows user to download closing prices for up to 100 funds per day
AMERICAN ASSN. OF INDIVIDUAL INVESTORS 312 280-0170	\$39* plus \$49 AAI membership	No	560 funds; covers funds with sales loads below 2% and no 12(b)-1 fees

*Annual cost for quarterly disk updates

**Basic program/annual cost for quarterly updates

DATA BW

Telescan (713 952-1060)—boast strong mutual-fund capabilities. But the most user-friendly program may be the \$240-a-year Investor's FastTrack (800 749-1348). With a single command, the program automatically dials an 800 number to download daily price up-

dates on more than 700 funds. FastTrack then displays the price changes in graphs going back to 1988, as well as in seven technical indicators, including moving averages and relative strength. FastTrack allows you to rank the performance of funds by family or

strategy during two periods.

While some programs may seem expensive, stay tuned: Competition is bringing prices down. But before you plunge in, test-drive these programs by taking advantage of free demo disks or low-cost trial packages. *Dean Foust*

Autos

A GERMAN SPORTS SEDAN WITH LESS STICKER SHOCK

Benzes, with rear drive, tend to feel more skittish.

Inside, the ride is quiet and smooth, except on rough roads where the stiff suspension gets jouncy. The seats are comfortable and supportive, in either cloth or optional

leather (\$1,300). Unlike the old version, the steering wheel now tilts and telescopes. And front and rear, there's plenty of head and leg room—a feature that's sometimes wanting in midlevel Japanese luxury sedans.

Audi's redesigned 100: More muscle under the hood



The dash is nicely laid out. The Audi's big, round dials are easy to read, with switches that fall readily to hand. Only the tiny, cluttered radio controls are tough to decipher. A stylish, sweeping hood neatly protects gauges from glare. A driver's air bag is standard. However, no passenger-side bag is available.

The Audi's price enhances its appeal. A base model with a five-speed manual transmission starts at \$27,700; an automatic adds \$800. The top-end 100CS starts at \$32,900. All models come with three years of free maintenance, including everything from oil changes to wiper blades. By comparison, a Mercedes-Benz 300E starts at \$42,950, while a BMW 525i begins at \$35,600. And the Audi is in the pack with its Japanese competitors: The Lexus ES300 begins at \$26,550 and the Acura Legend sedan at \$28,000. With the new 100, Audi is right back in the running. *David Woodruff*

Health

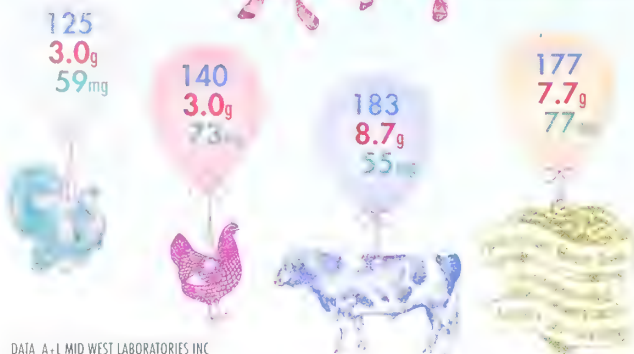
BUFFALO: IT'S TENDER ON YOUR HEART

If you've given up beef but still crave red meat, you can have your steak and good health, too. Eat buffalo. It's lower in fat, cholesterol, and calories.

Unlike the tough, old animals the Indians ate, today's buffalo are custom-fed and slaughtered at about 18 months. So the meat is as tender as beef and sweeter. "Most people come in because buffalo's new and different," says David Peters, executive chef at the Denver Buffalo Co., which operates a restaurant in Denver and a ranch near Kiowa, Colo. "They come back and bring their friends because they like it."

KOSHER, TOO. Bison are not given growth hormones, so their meat is considered natural. And you don't have to feel guilty eating buffalo, because with some 100,000 ani-

THE BENEFITS OF BISON



DATA: A-I MID WEST LABORATORIES INC

mals grazing on private ranches and in government parks, they are no longer an endangered species.

In addition to the Denver Buffalo Co., both The Fort and the Buckhorn Exchange in Denver serve buffalo. But you don't have to go West to savor it. La Colline, a French restaurant in Washington, D.C., prepares buffalo steak, braised tongue, and "mountain oysters"—fried testicles. Tommys Joynt in San Francisco

co offers buffalo stew and sandwiches, and Walt Disney World's most exclusive restaurant, Victoria & Albert's at the Grand Floridian Beach Resort, prepares grilled buffalo fillet in a cabernet raisin sauce. Even New York's kosher Levana restaurant serves buffalo dinners.

Buffalo is available for the home range, too. Butcher shops and some supermarkets carry steaks, roasts, and ground bison. You can order

buffalo by mail from Denver Buffalo Co. (800 BUY-BUF). Four eight-ounce top sirloin steaks (including air freight) are \$49, four 12-ounce briskets, \$85. Gift boxes containing salami, jerky, and meat sticks are among other items priced from \$35.50 to \$98.80.

QUICK COOKING. Other mail-order purveyors include Kenney's Korner Bison Ranch in Meshoppen, Pa. (717 932-2237), which ships fresh meat along with sausage and chipped bison, and Ken-A-Ranches in Bartlesville, Okla. (918 336-8211), which sells the types of jerky—mesquite smoked and hot-and-spicy.

You cook buffalo like beef but at a lower temperature. Because of its low fat content, it cooks faster and burns quicker. Roast buffalo at 275F instead of 325F, and grill steaks and hamburgers farther from the coals. The meat should be served rare, since toughens as it cooks.

Buffalo has one more advantage. The low fat makes it more filling than beef, which means you can get by on smaller portions—avoiding even more calories and cholesterol. *Sandra Atchison*

With interest rates down and the biggest disasters behind it, the savings and loan industry is enjoying newfound prosperity. But the thrifts aren't the only ones benefiting. Depositors at some S&Ls have discovered they can get in on the ground floor of a good investment when their institutions convert from mutual to stock ownership.

That's what depositors at Chicago's Craig Federal learned when it converted last June. Aside from employees, depositors were the only ones allowed to buy shares in the new Craig Financial Corp. for \$10 each. When trading began on June 6, 1991, the stock soared to \$14. Today, it's about \$20.

Why do thrift

Smart Money

WHEN S&Ls COULD BRING GOOD NEWS—FOR A CHANGE

shares often rise after a conversion? Legally, a mutual institution is owned by its customers. But financially, it has no shareholders. So when a mutual thrift converts to public ownership, the money raised is added to

the preexisting net worth, resulting in a net worth per share greater than the shareholders' contribution.

BEST BUYS. Richard Reibman, managing director of Advest Inc., suggests investing in a conversion only if the thrift is profitable and has equity of at least 4% of assets. Total assets should be at least \$250 million, which limits the field, since only about 250 of the 1,500 remaining mutuals are this large. Candidates that meet these criteria include Coral

Gables Federal S&L and Investors S&L. Neither has announced plans to go public. If they ever do, only the people who were depositors before the announcement would be eligible to buy stock.

Thrift conversions offer no guarantees. Equity holders can get wiped out if the thrift is taken over by the government. Rising interest rates are also a threat. Although S&Ls are currently converting at reasonable valuations, averaging 60% of book value, that could change. The market for conversions collapsed in the mid-1980s, after institutions sold at sky-high premiums. At the peak, "you heard stories about plumbers driving around the country opening savings accounts" to try to cash in on conversion, says Reibman. Better to save the gas and keep an eye on institutions in your own backyard. *Leah Spiro*

POSSIBLE CANDIDATES FOR CONVERSION

Institution	Assets (billions)
CORAL GABLES FEDERAL S&L	Coral Gables, Fla. \$2.5
INVESTORS S&L	Millburn, N.J. 1.8
POMONA FIRST FEDERAL S&L	Pomona, Calif. 1.5
STANDARD FEDERAL BANK	Chicago 1.4
CAMBRIDGE SAVINGS BANK	Cambridge, Mass. 0.9

DATA: LZO INC



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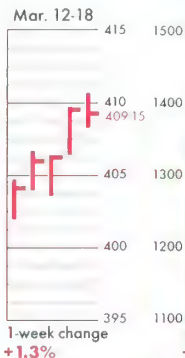
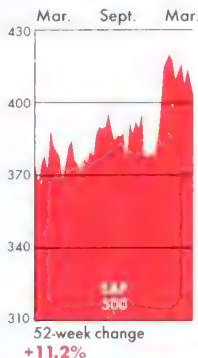
**Northwestern
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Investment Figures of the Week

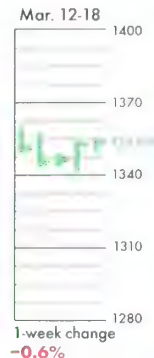
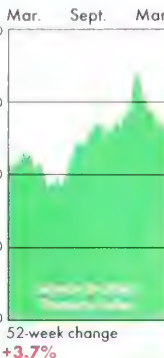
STOCKS

Stocks moved to the upside, defying continued bearish sentiment on Wall Street. Investors were heartened by data showing that the economy was at last emerging from recession. Not surprisingly, both short- and long-term interest rates fell. Foreign bourses didn't join the rally. The Nikkei hit a five-year low, while election jitters depressed London shares. Gold prices fell again, taking mining shares with them. As the Relative Portfolios on this page shows, over the past year, an investment in gold has had nothing but grief.

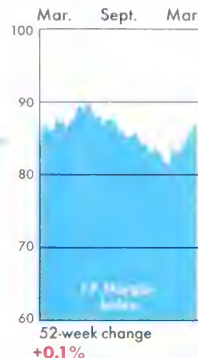
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS

	Latest	% change Week	% change 52-week
INDUSTRIALS	3254.3	1.4	13.3
COMPANIES (Russell 1000)	217.5	1.2	13.3
COMPANIES (Russell 2000)	208.2	0.6	25.8
COMPANIES (Russell 3000)	232.6	1.1	14.1

STOCKS

	Latest	% change (local currency) Week	% change (local currency) 52-week
FINANCIAL TIMES 100	2464.7	-2.3	1.0
NIKKEI INDEX	19,764.3	-4.0	-25.3
TSE COMPOSITE	3451.9	-1.5	-0.8

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	4.14%	4.10%	6.1%
30-YEAR TREASURY BOND YIELD	8.01%	7.96%	8.4%
S&P 500 DIVIDEND YIELD	2.98%	3.00%	3.3%
S&P 500 PRICE/EARNINGS RATIO	25.5	25.2	17.1

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	398.2	397.4	Positive
Stocks above 26-week moving average	64.0%	66.7%	Neutral
Speculative sentiment: Put/call ratio	0.42	0.41	Positive
Insider sentiment: Vickers sell/buy ratio	1.82	1.62	Positive

INDUSTRY GROUPS

WEEK LEADERS

	% change 4-week	% change 52-week
INSTRUMENTATION	20.9	59.0
TRANSPORTATION SERVICES	8.9	34.8
WHOLESALES	5.7	8.5
DRINKS	5.3	29.8
ENTERTAINMENT	4.7	17.7

WEEK LAGGARDS

	% change 4-week	% change 52-week
MINING	-11.3	-17.0
PURE TIME	-10.2	-18.5
ENGINEERING AND CONSTRUCTION	-10.0	-14.7
HOSPITAL MANAGEMENT	-9.2	-13.5
	-8.8	-35.4

Strongest stock in group

	% change 4-week	% change 52-week	Price
HEWLETT-PACKARD	24.0	66.9	78 7/8
FEDERAL EXPRESS	15.4	38.6	55 1/4
SYSCO	9.2	30.0	46
COCA-COLA	7.0	53.6	82 3/8
WALT DISNEY	5.4	22.3	150 3/4

Weakest stock in group

	% change 4-week	% change 52-week	Price
PITTSBURGH	-16.8	-17.9	14 7/8
HOMESTEAK MINING	-17.5	-23.5	13
BRUNSWICK	-13.8	5.3	14 7/8
FLUOR	-11.3	-15.7	40 3/8
HUMANA	-10.5	-23.2	24 1/2

BRIDGE INFORMATION SYSTEMS INC

MUTUAL FUNDS

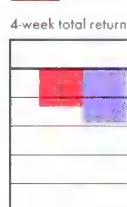
LEADERS

	%
4-week total return	
MARK	3.2
VALUE	2.6
PER INVEST. PORT. DIVERS. INCOME	2.5
52-week total return	
AMERICAN HERITAGE	67.4
LIFETIME EMERGING GROWTH	58.2
ARWIS EMERGING GROWTH	57.7

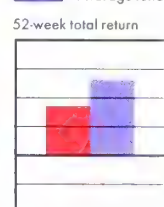
LAGGARDS

	%
4-week total return	
STRATEGIC INVESTMENTS	-15.9
SUNAMERICA PRECIOUS METALS	-14.7
UNITED SERVICES GOLD SHARES	-13.1
52-week total return	
STRATEGIC GOLD/MINERALS	-31.6
NIKKEI JAPAN TILT	-29.6
FIDELITY SELECT ENERGY SERVICE	-29.6

S&P 500



Average fund



MORNINGSTAR INC

RELATIVE PORTFOLIOS

Amounts represent the present value of \$10,000 invested one year ago in each portfolio.

Pages indicate relative total returns.



DATA RESOURCES INC

on this page are as of market close Wednesday, Mar. 18, 1992, unless otherwise indicated. Groups include S&P 500 companies only; performance and share prices are as of market close.

Mar. 17. Mutual fund returns are as of Mar. 13. Relative portfolios are valued as of Mar. 17. A more detailed explanation of this page is available on request.

STOPPING RUNAWAY CEO PAY

An unintended consequence of President Bush's January trade mission to Japan with a retinue of 21 top business executives was to underscore the yawning discrepancy between the compensation of chief executive officers in the U.S. and those in Japan. Many Japanese and Americans were shocked to learn that the compensation of CEOs of large U.S. corporations averages \$2 million, compared with about \$500,000 in Japan. Add to that a blistering denunciation of CEO compensation practices by consultant Graef S. Crystal in his widely quoted *In Search of Excess*, and the issue of executive compensation has suddenly moved to the forefront of public debate (page 52).

Predictably, politicians have moved into the fray with calls to stem executive pay raises through income taxation. This is a bum idea—and not just because many companies would simply pay the added taxes. The right place to halt immoderate CEO pay raises is in the corporate boardroom. A good start would be for the compensation committee of the board to retain an outside consultant to review recommendations of pay consultants, who are typically hired by the CEO. The boss should make himself scarce when his own pay is being discussed. Lawyers, investment bankers, and consultants who draw fees from the company shouldn't serve on the committee, nor should other CEOs—to forestall the old-boy network. And to forge a link between the shareholders and the board, directors should be paid in shares.

The criteria governing compensation also need reform. For starters, the boss should get a salary, bonus, stock options—period. A CEO's base salary should not exceed \$1 million, even for the largest companies. Anything more should be paid only when the CEO and his management group meet tough performance targets against an industry peer group. Set stock-option grants above market levels so shareholders benefit before executives. And stock options, which do have value, should be charged against earnings.

Salary, bonus, and options should be reported in the proxy statement in a single, easy-to-read table that includes data for three years. As the Securities & Exchange Commission rightly recommended in February, the remuneration package should be easy for anyone, especially stockholders and potential investors, to understand.

SO FAR, SO GOOD AT THE FED

Let's hope that as the economy heads toward recovery, the Federal Reserve draws the correct conclusions from the past two years to guide its policy. The most obvious is that monetary policy works. The most important is that bold policy action will achieve what timid moves cannot (page 22).

Last year's series of small quarter-point cuts in the federal

funds rate failed to produce a sustainable recovery. Those cuts were widely anticipated in the financial markets by the time they were enacted, so they didn't generate the kind of psychological impact required to lift the economy out of its funk. On the other hand, signs now point to faster growth after the Fed's large half-point cut on Dec. 20 and its bold move on Feb. 18 to cut reserve requirements—moves that took the markets and the public by surprise.

The Fed's task now is to avoid its mistakes of last year. For the present, with the economic data looking much better, that means doing nothing. Further easing would be counterproductive because it would spook the inflation-wary credit markets. However, any thoughts of tightening should be put off for a long time. Under the heavy weight of debt and other structural problems, the recovery cannot tolerate the slightest hindrance.

Forget about stubbornly high long-term interest rates for now. The Fed's past tightness, which produced three years of feeble economic growth at an annual rate of 0.5%, has tamed inflation. When the price indexes finally convince the bond market that inflation is dormant, long rates won't be so jumpy in the face of recovery. But if policy action by the Fed in either direction is required along the way, the lesson from 1991 is that it should be quick and bold.

THE REBIRTH OF A NATION

White South Africans had reason to feel proud for the first time in decades when they voted overwhelmingly to support President F.W. de Klerk's revolutionary efforts to end apartheid (page 42). For his triumphant facing-down of intolerant racists, De Klerk has earned international admiration. Indeed, South Africa's steady shift from a society of hate to one of inclusion ranks alongside the collapse of communist regimes in the former Soviet Union and the East bloc as a milestone in history. Now the real work of building a new society can begin.

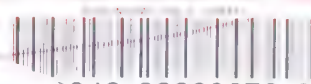
Over the next few months, an interim government composed of blacks and whites should be put in place to oversee the writing of a new constitution. That will be the conclusive sign that South Africa is on its way to reentering the world community. And it will give business a green light to return.

There are still enormous imbalances in South Africa, with high unemployment and deep poverty endemic among the black majority. The reeling economy helps fuel violence. But foreigners shouldn't be scared off. They will have a new partner in South Africa's first legitimate government in 40 years. Already, some American businesses are reaching out to the African National Congress and other black leaders to discuss what kinds of investments will help rebuild the nation. And American cities and states can now begin to dismantle their bans on trade and investment with South Africa. President Bush and Congress should consider trade benefits and perhaps aid as soon as a new constitution enshrines universal suffrage. Whites in South Africa have wisely chosen to follow De Klerk on the road to progress. Only blacks and whites together can walk the next mile.

April 3

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25 EXECUTIVES
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A GUIDE
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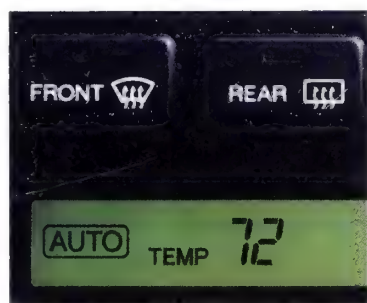
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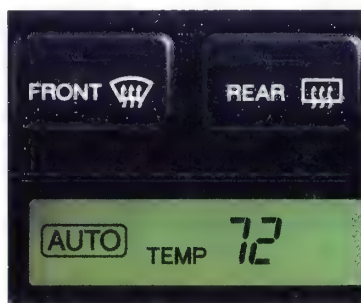
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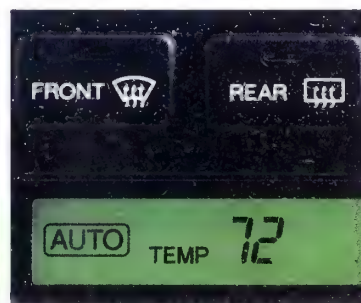
Maybe It's Time You Injected Some Monotony Into Your Life



Monday



Tuesday



Wednesday



The ES300

*Plus ça change, plus
c'est la même chose,*

the more things change,

the more they remain the

same. Lexus engineers are

firm believers in this quip, at

information. This information

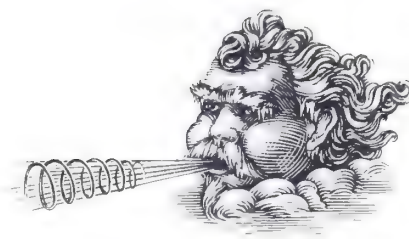
is then relayed to the climate

control microprocessor, which

has at its disposal sixteen air

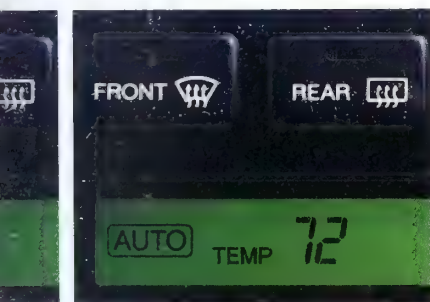
vents in order to either cool you

down or warm you up.

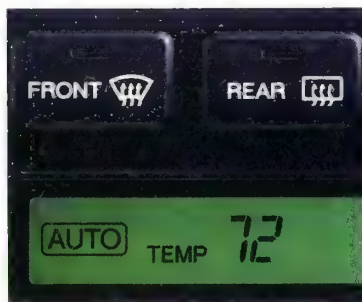


cools with remarkable quick-
ness and efficiency.

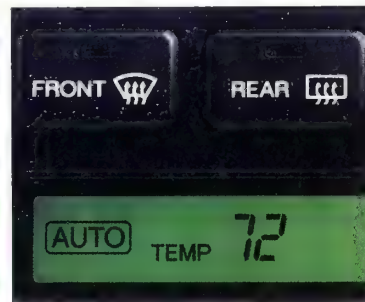
The result? The weather
may not be predictable, but



Friday



Saturday



Sunday

just when it comes to the

by the automatic cli-

mate control of the Lexus

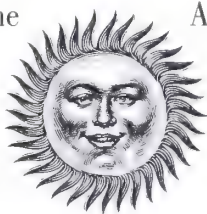
ES300 sports sedan operates.

Four sensors, including a

star sensor that can measure

ambient light from the sun's

rays, are used to help gather



All this may sound highly

technical (indeed it is),

but it runs like a

breeze. The temperature

readout is an illuminated liq-

uid crystal display; the controls

are large and conveniently

placed; the airflow warms or



the cabin of the Lexus ES300

surely is. Day in, day out, it's

always the same old

story. Which, when

you think about it, is quite a

pleasant surprise.



The Relentless Pursuit Of Perfection.



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THE TOP 100 DEALS

The dollar value of M&A fell 40%, on top of a 33% tumble in 1990. But a couple of megadeals kept merger-watchers from nodding off. And consolidation of financial-service companies produced some action

74



25 EXECUTIVES TO WATCH

They're riding high—or they may be headed for a fall. One way or another, they're the folks who are on the spot, and the ones worth keeping an eye on for the year ahead

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Dental Benefits Add Value, Not Cost

As the cost of health benefits continue to rise, many companies are striving to cut or contain expenditures without losing the value of the overall package to their employees. Increasingly, employers are turning to dental insurance as a popular way to offer meaningful benefits while accomplishing cost management.

Employer-sponsored dental insurance covers nearly two-thirds of today's work force, up from only 4% in 1970. According to the National Institute for Dental Research, employees find dental benefits so practical that almost 60% of those covered use them for themselves and their families at least once a year. Yet, dental insurance in today's benefits market costs employers an average of only \$331 a year per employee, compared with an average of \$3,161 to provide employee medical coverage.

True Cost Management

Dental carriers offer a variety of benefits programs, including among others the traditional fee-for-service, health maintenance plans, and preferred provider options. The latter two are examples of *managed care* programs, in which purchasers choose from a select group of dentists who agree to provide services at contracted fees, thereby lowering the overall benefits package costs. But cost controls are designed into many fee-for-service programs as well.

Some "managed care" features to look for in fee-for-service programs include an extensive network of dentists to give family members, wherever they may live, greater freedom of choice; pre-filed fee systems, which ensure treatment at previously agreed-to rates; no balance billing to protect patients from unexpected charges; in-office fee audits to verify patients from unexpected charges; in-office fee audits to verify that procedures are priced consistently and are within the group contract terms; and dental case management, a peer review system to ensure that treatment meets acceptable standards of care.

Prompted by the cost-effectiveness of these programs, even self-insured companies are turning to dental carriers.

Innovative administration packages from dental carriers enhance these companies' ability to provide coverage at reasonable costs.

Significant Savings Through Specialization

Because dental benefits are often bundled with a comprehensive medical package, employers whose health insurance carriers approach dental coverage as a sideline activity often pay more than necessary. As medical costs continue to increase, many employers have begun to appreciate the value of switching to an insurer that specializes in dental coverage.

Organizations that specialize in dental coverage offer stronger, more customized programs, more thorough financial and case management systems, and more efficient claims service operations. Put simply, specialization fosters efficiency and stronger cost controls.



Customization Saves Even More

Customized benefits programs can yield additional cost savings for employers by tailoring the dental program to fit a specific company's needs. For example, customized plans can range from

simple prevention programs that cover x-rays and cleaning to the most comprehensive that also cover basic services (fillings, root canals, and oral surgery), major dental work (crowns, bridges, and dentures) and, if desired, orthodontia. By designing a custom program, employers don't have to pay for services that employees won't use.

What's Best for You

The best dental insurers respond to the needs of the purchaser. When examining dental carriers to find what's best for you and your company, look for one that collaborates with you to tailor programs to your specific needs.

Those needs should include both a service that will be valued by your employees *and* that will meet your company's financial goals. ■



To us, dental plans are second nature.
To others, they're second to everything else.

All too often, the convenience of opting for a bundled benefits package is offset by the weakness of the dental program component. □ That's why it's to your company's advantage for you to choose the expertise and quality assurance offered by Delta Dental. □ Since 1954, Delta Dental has been the only national organization committed exclusively to dental benefits. Our comprehensive cost management program makes Delta Dental a greater value in the long run and limits employees' out-of-pocket costs. And our extensive network of participating dentists allows us to deliver managed care features at a level unmatched by companies for whom dental plans are merely a sideline. □ That's why Delta Dental has a 98% customer retention rate, covers more than 22 million people in more than 28,000 groups and pays more than \$2 billion a year for dental care. □ To learn more about how your group can share in the advantages of choosing the nation's largest specialist in dental health plans, call 1-800-441-3434 today.

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EDITOR'S MEMO

This is the seventh year for the BUSINESS WEEK 1000, our report on America's most valuable companies. And once again, the shifting composition of the 1992 list confirms the usefulness of our key standard for measuring corporate strength—market value.

This ranking measures the worth that the marketplace itself assigns to a company, so it reflects the cumulative impact of thousands of judgments based on vast amounts of information. And unlike other annual lists ordered by sales, profits, or assets, our market-value ranking is forward-looking, because the market buys or sells based not on historical results but on expectations for the future. Finally, a company's sales, assets, and even profits often change at a glacial rate. It may take years before these

yardsticks reflect fundamental shifts in a company's position and prospects. But market value can change swiftly, profoundly—and mercilessly.

Of course, our list includes many other measures. But market value proves to be a uniquely sensitive, dynamic indicator. Consider the case of IBM. Big Blue tumbled from No. 1 to No. 8 on our list, but if you had seen only its sales ranking, you might have figured nothing was going on. Despite its cataclysmic year, IBM was No. 4 in sales in 1991—just as it was the year before.

Market value also has much to say

about the shifting sources of future growth in the U.S. economy. To get a feel for this predictive power, look at the relative positions of General Motors and Merck. While GM continues to rank No. 1 in sales, the troubled auto giant is all the way down at

No. 19 in value. Merck, on the other hand, is a mere No. 112 in sales—but the market says this archetype of innovation is the fifth most valuable corporation in America.

The BUSINESS WEEK 1000 ranking is the heart of this 1992 Bonus Issue, but there's lots more here.

For our list of companies with healthy prospects but scanty sales, turn to the Little Giants. To take a colorful tour of two high-tech hotshots, visit the Photo Essay. For our update on the year's M&A activity, check out the Top 100 Deals. And for the human drama behind the numbers, look in on the 25 Executives to Watch. We think you'll find this Bonus Issue instructive now—and a valuable source of information over the coming year.

Stephen B. Shepard

Editor-in-chief



Live Your Life To Music.

Step Up To The Bose Lifestyle Music System Now!



The Bose Lifestyle music system includes Direct/Reflecting speaker arrays; Lifestyle music center with built-in CD player and AM/FM stereo radio; remote control that works around corners and through walls. Also comes with a 16" Acoustimass bass module (not shown).

Advanced technology that will change the way you enjoy music.

New Bose patented technology, including Acoustimass speaker technology and automatic dynamic equalization, has enabled us to reduce the size and complexity of the stereo system while actually improving performance.



The award-winning Lifestyle music system replaces an entire rack of conventional equipment and speakers. And its ease-of-use and versatility will enable you to live your life to music in ways you never thought possible.

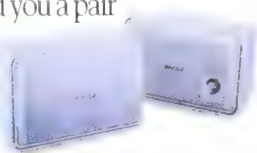
Enjoy sound quality second only to that of a live performance; audition the Lifestyle music system.

"No visible speakers, no stack of components, nothing that looks like sound equipment. ... Hit the start button and suddenly the room fills with music of exemplary clarity and fullness."

— Hans Fantel, *The New York Times*, 1990*

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If an accident happened and you YELLED,
"Is there a middle manager in the house?"
would anyone come to the rescue?

What is a middle manager, anyway?

Valuable decision-maker, or paper pusher?

How do you measure?

Sales per employee? Memo count?

Meetings per hour (MPH??)

And now that we're all trying to

re-invent the corporation,

What do we do with them?

By asking them to re-invent their jobs.

From the ground up.

Maybe you can eliminate middle-level redundancy,

eliminate 10 people,

take advantage of the knowledge

accumulated and ideas of your managers.

They're suddenly corporate stars.

They can't come to the meeting.

Thank God for the fax machine.

They're gone, but their ideas are still there.

They're gone, but their ideas are still there.

They're gone, but their ideas are still there.

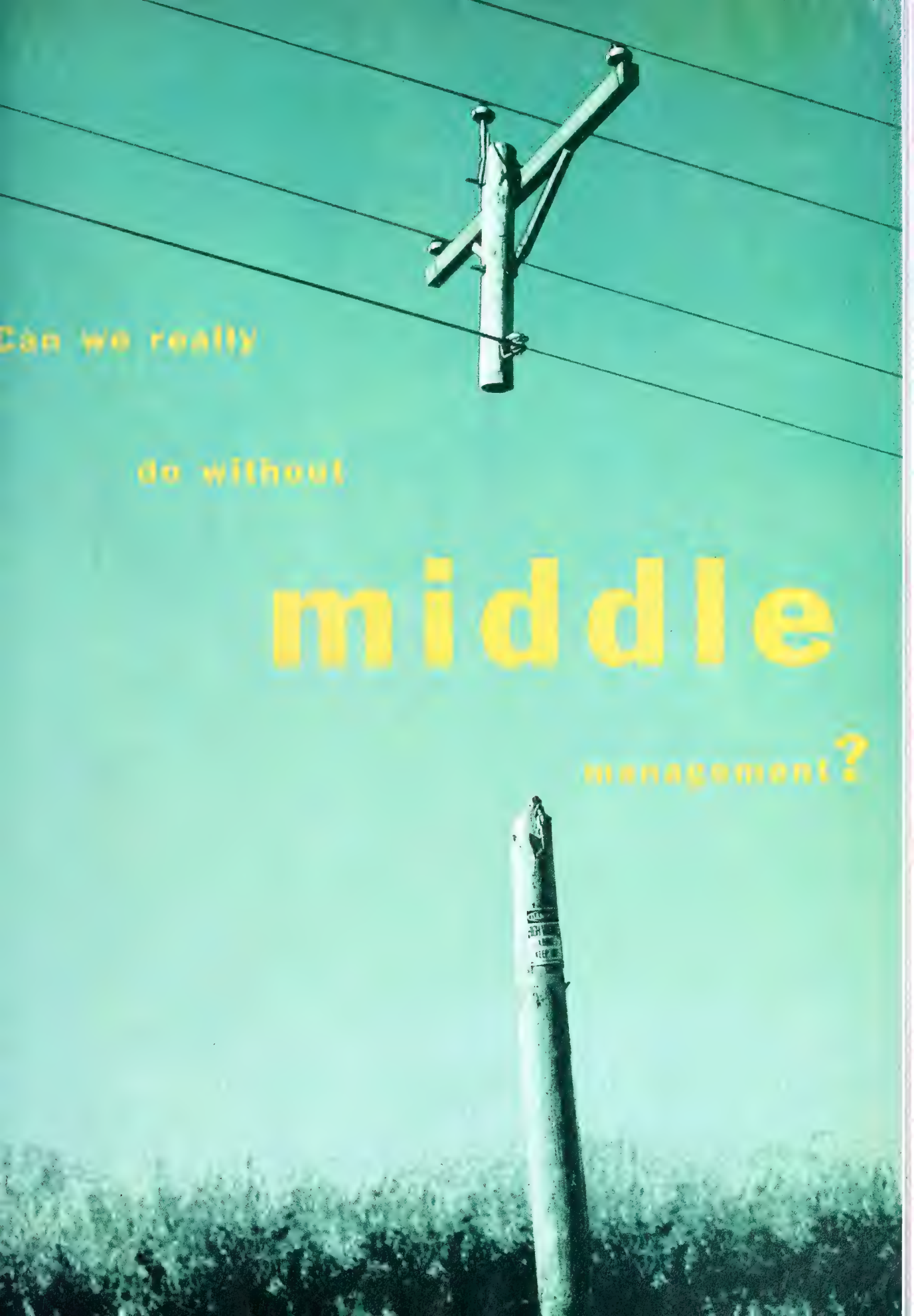
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Can we really

do without

middle

management?



THE BUSINESS WEEK 1000

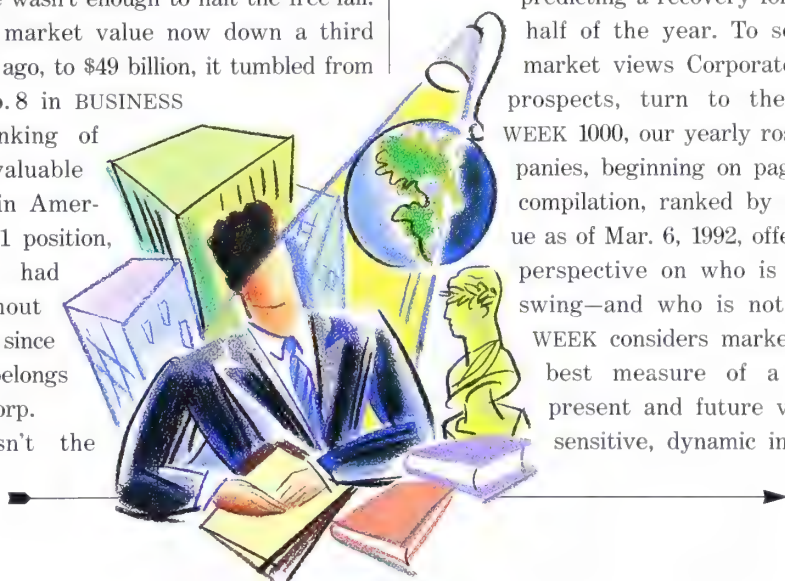
*h*ow the mighty have fallen. As the recession ground on into 1991, nearly every industry felt the pinch, from autos to airlines to computers. Look at one result: IBM tumbled from its perch and, like Humpty Dumpty, split into pieces. Spooked by a torrent of bad news, including a first-ever annual loss, investors knocked an astonishing \$26 billion off Big Blue's market value over the past year. Looked at another way, Wall Street devalued the computer giant by more than the total market value of General Motors Corp.

IBM Chairman John F. Akers responded to the slide last November with a bold plan to split up his company into smaller, theoretically more competitive, units. But even that ambitious scheme wasn't enough to halt the free-fall. With IBM's market value now down a third from a year ago, to \$49 billion, it tumbled from No. 1 to No. 8 in BUSINESS WEEK's ranking of the most valuable companies in America. Its No. 1 position, a place it had held without interruption since 1983, now belongs to Exxon Corp.

IBM wasn't the

only corporate giant to come undone last year—just the biggest. Once the post-gulf-war giddiness subsided, the reality of layoffs and a still-languid real estate market sent consumer confidence to its lowest level in almost 20 years. GM's \$4.9 billion loss for 1991 was the biggest in its history. American Telephone & Telegraph Co., after restructuring charges and writedowns, saw net income fall 83%, to \$522 million.

What will 1992 bring? Many economists are predicting a recovery for the second half of the year. To see how the market views Corporate America's prospects, turn to the BUSINESS WEEK 1000, our yearly roster of companies, beginning on page 116. This compilation, ranked by market value as of Mar. 6, 1992, offers a unique perspective on who is on the upswing—and who is not. BUSINESS WEEK considers market value the best measure of a company's present and future value. It's a sensitive, dynamic indicator, un-



like the static financial data that other publications use to rank companies.

Total profits at the BUSINESS WEEK 1000 companies were off 18% last year on a mere 2% revenue increase. Yet the market may see a turnaround in the offing. The collective value of the BUSINESS WEEK 1000 gained 13%, to an impressive \$3.4 trillion, since the last ranking. But be careful not to read too much into that gain. These companies also had an average of 8 million more shares in the public market last year, hiking their collective value. Their average price per share gained only 7% over 1991.

Regaining momentum

If it's emerging trends you're looking for, see the list of Little Giants on page 23. These are the companies on the BUSINESS WEEK 1000 with sales of less than \$100 million. As in years past, companies in emerging technologies such as drugs, health care research, and telecommunications dominate the list. Some Little Giants of years past have

gone on to great things, such as biotech superstar Genentech Inc. Tread carefully here, though. Because they're small and volatile, these companies tend to move downward in a hurry, too. Seven of last year's 32 Little Giants fell completely off this year's BUSINESS WEEK 1000.

Naturally, the bull market did a lot for the fortunes of Wall Street. Badly battered in the years since the 1987 crash, many financial-services companies regained some momentum with exceptional performances in 1991. Take a look at Merrill Lynch & Co. Its investment bankers have been riding the wave of recent public stock offerings, and its giant sales force has been bringing in big commission gains. All the way down at No. 215 last year, it bounded up 88 places with a market-value surge of \$2.8 billion. But one financial-services area that probably won't see much of a pickup this year, at Merrill or anywhere, is mergers and acquisitions: The takeover trade was deathly quiet for the second year running. (The Top 100 Deals, page 65.)

An exception to that rule was the banking business,

THE TOP 15 IN MARKET VALUE

COMPANY	CURRENT VALUE (BILLIONS OF DOLLARS)	PERCENT CHANGE FROM A YEAR AGO
1 EXXON	\$69.1	0%
2 PHILIP MORRIS	68.8	11
3 GENERAL ELECTRIC	67.0	15
4 WAL-MART STORES	61.0	49
5 MERCK	58.0	41
6 COCA-COLA	52.4	50
7 AT&T	49.4	37
8 IBM	49.3	-34
9 BRISTOL-MYERS SQUIBB	41.4	2
10 PROCTER & GAMBLE	33.6	11
11 JOHNSON & JOHNSON	32.0	7
12 DU PONT	29.5	16
13 GTE	26.8	26
14 ABBOTT LABORATORIES	25.4	25
15 PEPSICO	25.1	-2

THE TOP 15 IN SALES

COMPANY	1991 SALES (BILLIONS OF DOLLARS)	PERCENT CHANGE FROM A YEAR AGO
1 GENERAL MOTORS	\$123.1	-1%
2 EXXON	104.2	-2
3 FORD MOTOR	88.3	-10
4 IBM	64.8	-6
5 GENERAL ELECTRIC	59.4	3
6 SEARS, ROEBUCK	57.2	2
7 MOBIL	56.4	-4
8 PHILIP MORRIS	48.1	8
9 AT&T	44.7	2
10 WAL-MART STORES	43.9	35
11 CHEVRON	40.9	-4
12 DU PONT	38.7	-3
13 TEXACO	38.3	-8
14 KMART	35.0	8
15 CITICORP	31.8	-17

which featured some certifiable megadeals last year. NCNB merged with C&S/Sovran to form NationsBank, now No. 59 on the list, with a market value of \$10.3 billion. Chemical Bank joined with crosstown rival Manufacturers Hanover. And BankAmerica won approval to merge with Security Pacific. As a group, banks' market value gained 41% for the year, with struggling Citicorp and Wells Fargo the only real sore spots.

One of the year's most impressive gainers in any industry was Microsoft Corp. With a \$9.3 billion surge in market value, to \$21 billion, the 17-year-old software maker vaulted past venerable Ford to No. 24 on the BUSINESS WEEK 1000. Much of the credit belongs to Windows, Microsoft's program that makes IBM PCs operate with the graphic "look and feel" of Apple's Macintosh. Now, the question is whether founder William H. Gates and his newly realigned management team can keep Microsoft ahead of its considerable competition.

Every company has to worry about competition to some

extent, but some of last year's brightest stars simply left their rivals in the dust. Wal-Mart Stores Inc. accounted for 35% of the dollar gain in retailing, with a \$20 billion surge. Then there was The Gap Inc. While most of its peers seemed to be either filing for bankruptcy protection or emerging from it, the San Francisco-based clothing chain rode its "good style, good quality" strategy to new heights in profitability. Its market value climbed \$2.9 billion, lifting it from No. 198 in 1991 to No. 108.

New Arrivals

Another retail luminary, Home Depot Inc., shot up 57 places, with a market-value gain of almost \$7 billion. The innovative home-improvement chain keeps building new warehouse-size stores at a breakneck rate—40 are planned this year, even more in 1993—but its debt seems manageable for now. Analysts expect revenues will top \$7 billion by next year, vs. \$250 million a decade ago.

This year's BUSINESS WEEK 1000 saw the public debut of

THE TOP 15 IN PROFITS

COMPANY	1991 PROFITS (BILLIONS OF DOLLARS)	PERCENT CHANGE FROM A YEAR AGO
1 EXXON	\$5.6	12%
2 GENERAL ELECTRIC	4.4	3
3 PHILIP MORRIS	3.9	11
4 MERCK	2.1	19
5 BRISTOL-MYERS SQUIBB	2.1	18
6 MOBIL	1.9	0
7 PROCTER & GAMBLE	1.8	3
8 COCA-COLA	1.6	17
9 WAL-MART STORES	1.6	25
10 BOEING	1.6	13
11 AMERICAN INT'L GROUP	1.6	8
12 GTE	1.5	-6
13 BELL SOUTH	1.5	-8
14 JOHNSON & JOHNSON	1.5	28
15 FANNIE MAE	1.5	24

THE TOP 15 IN ASSETS

COMPANY	1991 ASSETS (BILLIONS OF DOLLARS)	PERCENT CHANGE FROM A YEAR AGO
1 CITICORP	\$224.1	-2%
2 GENERAL MOTORS	184.3	2
3 FORD MOTOR	174.4	0
4 GENERAL ELECTRIC	168.3	9
5 AMERICAN EXPRESS	153.5	9
6 FANNIE MAE	147.1	10
7 CHEMICAL BANKING	138.9	2
8 BANKAMERICA	115.5	4
9 NATIONS BANK	110.3	-5
10 SEARS, ROEBUCK	106.4	11
11 J.P. MORGAN	103.5	11
12 CHASE MANHATTAN	98.2	0
13 SALOMON	96.7	-12
14 IBM	92.5	6
15 AETNA LIFE & CASUALTY	92.0	3

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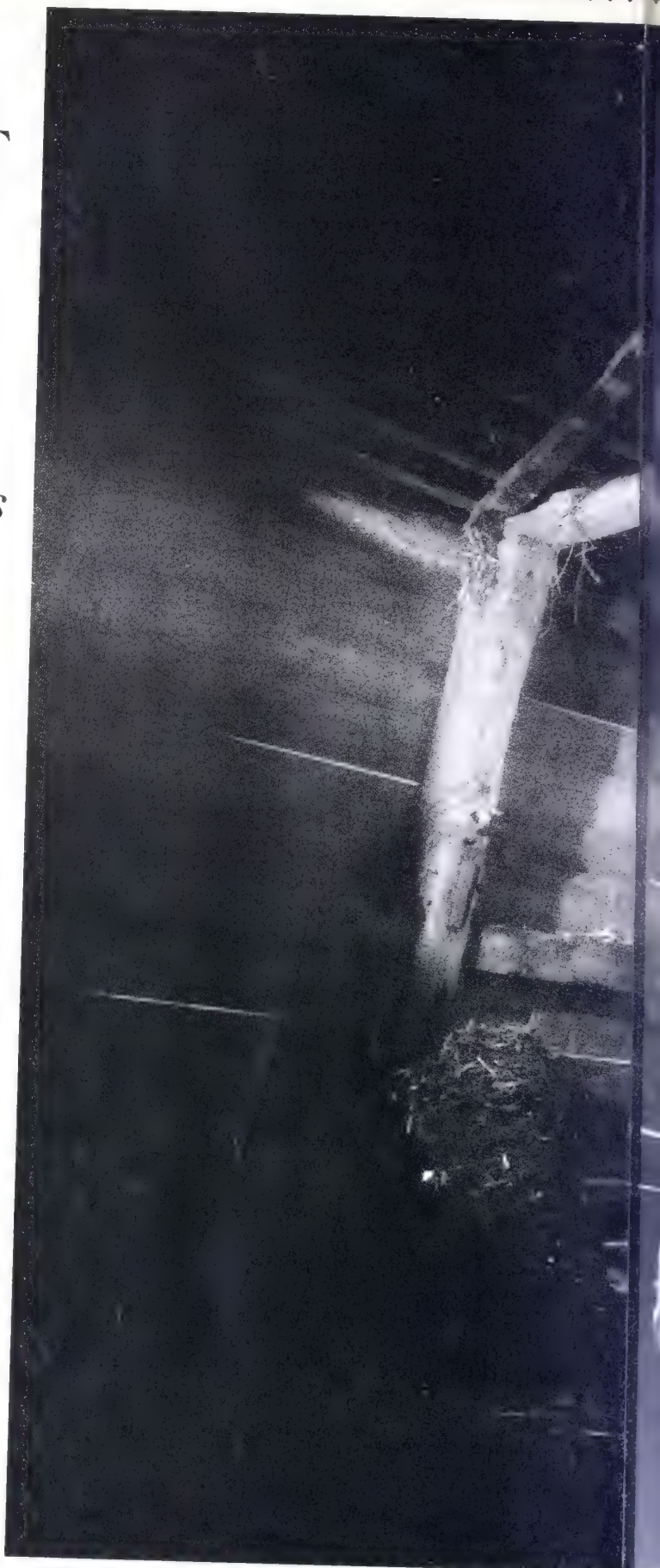
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INTEREST
IS NOT IN
How Fast
AN INVESTMENT
Accelerates
BUT HOW WELL
it Performs
OVER TIME.

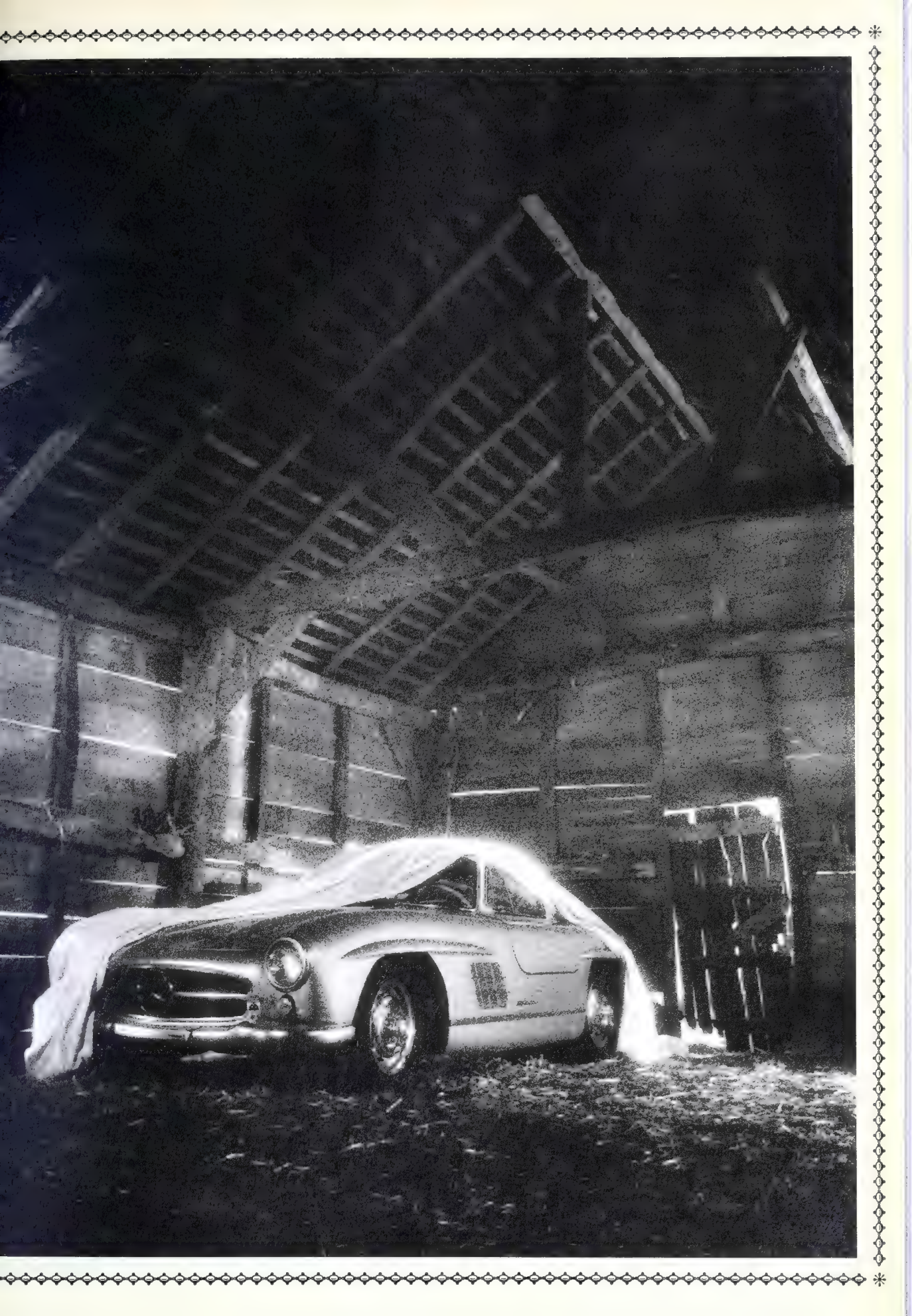
TIME not *TIMING*. That's how we MAKE our INVESTMENT DECISIONS. While others might have an EYE for a QUICK RETURN, *54 years experience* has taught us that AN INVESTMENT CONSTANTLY nurtured, and CAREFULLY steered, should *PAY OFF HANDSOMELY* in the LONG RUN. SOMETHING our 1.7 million *INDIVIDUAL INVESTORS* and over 200 INSTITUTIONAL CLIENTS *appreciate*.



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some familiar corporate names. Marvel Entertainment Group, publisher of comic-book classics such as *Spider-Man* and *The X-Men*, was no laughing matter at No. 899. Filene's, well-known to bargain hunters in Boston and beyond, cashed in at No. 865. And toymaker Fisher-Price grew up and got its own public listing after a July spin-off from Quaker Oats Co. FP's \$561 million market value put it at No. 910. Quite a few notable names departed from the list as well, including NCR and Square D. Their reasons, respectively: a bitterly contested acquisition by AT&T and an international takeover. And you won't find USX anymore. It was split into separate stocks representing its steel and energy operations, USX-U.S. Steel Group and USX-Marathon Group.

As an industry, health care had the most robust dollar gain by far. These 83 companies, paced by the likes of Merck & Co. and Amgen Inc., gained \$69 billion. The biggest jump up the rankings ladder—among all 1,000 companies—belonged to tiny International Game Technology, which leaped a gravity-defying 494 places to No. 444. This casino-games maker has had an incredible run lately, with profits soaring as gambling fever spreads across the nation.

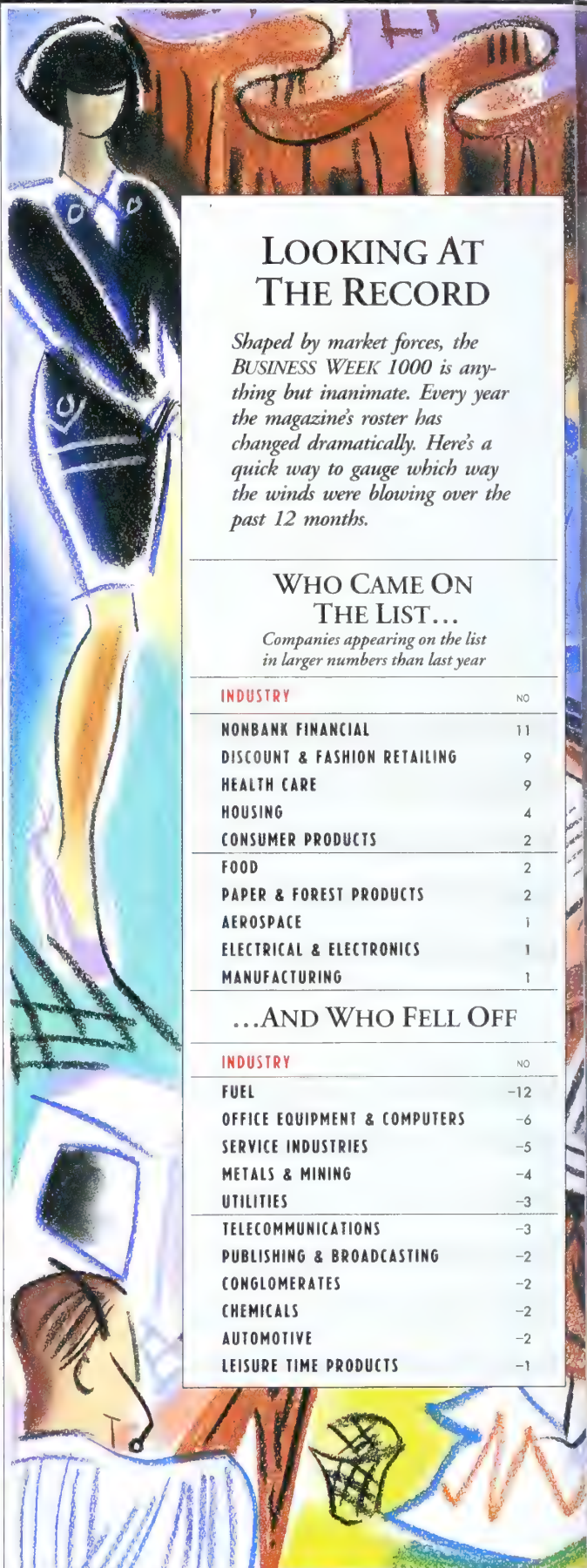
Fuel's bright spot

Over at A&P, lots of shareholders are wishing they'd never gambled on the grocery-store chain. The Great Atlantic & Pacific Tea Co., a highflier only a short while ago, fell 231 places on the BUSINESS WEEK list, to No. 547. The main problem: The supermarket chain's stronghold, the Northeast, was among the regions hardest hit by recession. At least A&P can take some consolation in that it didn't fall the farthest. That distinction belongs to Community Psychiatric Centers. Clubbed by competitive pressures, it tumbled 480 spots, to No. 839.

The biggest broad group to post an industrywide market-value loss was fuel, whose 44 companies lost \$35 billion in value, or 11%. Nailed by the continuing downturn in oil-field services, Halliburton Co. was hardest hit. It said farewell to more than half its market value.

A notable bright spot in the bleak fuel group was Exxon Corp., whose \$69 billion market value assured it the No. 1 place in the BUSINESS WEEK 1000. With the \$1 billion Valdez oil spill cleanup finally wrapped up, the world's largest oil company racked up profits of \$5.6 billion on revenues of \$104.2 billion.

Despite posting big losses, the auto industry came through 1991 in decent shape—at least in terms of market value. GM slipped one place, but Ford Motor Co., a money-loser for the year, rose four places to No. 31 on a \$1.3 billion market-value gain. Chrysler Corp. did far better, climbing 34



LOOKING AT THE RECORD

Shaped by market forces, the BUSINESS WEEK 1000 is anything but inanimate. Every year the magazine's roster has changed dramatically. Here's a quick way to gauge which way the winds were blowing over the past 12 months.

WHO CAME ON THE LIST...

Companies appearing on the list in larger numbers than last year

INDUSTRY	NO
NONBANK FINANCIAL	11
DISCOUNT & FASHION RETAILING	9
HEALTH CARE	9
HOUSING	4
CONSUMER PRODUCTS	2
FOOD	2
PAPER & FOREST PRODUCTS	2
AEROSPACE	1
ELECTRICAL & ELECTRONICS	1
MANUFACTURING	1

...AND WHO FELL OFF

INDUSTRY	NO
FUEL	-12
OFFICE EQUIPMENT & COMPUTERS	-6
SERVICE INDUSTRIES	-5
METALS & MINING	-4
UTILITIES	-3
TELECOMMUNICATIONS	-3
PUBLISHING & BROADCASTING	-2
CONGLOMERATES	-2
CHEMICALS	-2
AUTOMOTIVE	-2
LEISURE TIME PRODUCTS	-1

WINNERS...

The market value of these industry groups grew by the most amount from last year

INDUSTRY	MARKET VALUE DIFFERENCE (IN \$MILLIONS)
DISCOUNT & FASHION RETAILING	\$54,297
DRUGS & RESEARCH	42,376
ELECTRIC UTILITIES	26,796
FINANCIAL SERVICES	24,972
COMPUTER SOFTWARE & SERVICES	21,970
BANKS—EAST	21,835
BEVERAGES	18,880
TELECOMMUNICATION EQUIPMENT	18,752
TOBACCO	18,242
BANKS—MIDWEST	16,622
CHEMICALS	15,714
FOOD PROCESSING	15,666
MEDICAL PRODUCTS	15,618
BANKS—SOUTH & SOUTHEAST	14,385
PERSONAL CARE	10,376
PUBLISHING	10,130
GENERAL MANUFACTURING	9,667
HEALTH CARE SERVICES	9,266
RAILROADS	9,225
PAPER	6,018
INSURANCE	5,869
BANKS—WEST & SOUTHWEST	5,449
APPLIANCES & FURNISHINGS	5,338
FOREST PRODUCTS	5,222

...AND LOSERS

While the market value for these industry groups dropped the most

INDUSTRY	MARKET VALUE DIFFERENCE (IN \$MILLIONS)
COMPUTERS & PERIPHERALS	-\$28,776
OIL & GAS	-22,937
PETROLEUM SERVICES	-11,516
TELEPHONE COMPANIES	-8,918
GAS & PIPELINE UTILITIES	-4,789
POLLUTION CONTROL	-2,364
ENGINEERING & CONSTRUCTION	-1,294
COAL	-736
ALUMINUM	-268

DATA: STANDARD & POOR'S COMPUSTAT SERVICES, INC.

places, to No. 173. With production beginning on its new Jeep, and its much-awaited LH line of cars coming out in the fall, analysts are cautiously upbeat about Chrysler. Next big challenge: easing in GM veteran Robert J. Eaton as the successor to Chairman Lee A. Iacocca (page 102).

One new CEO, Goodyear Tire & Rubber Co.'s Stanley C. Gault, gave the auto-parts group a big lift for the year. The former Rubbermaid Inc. boss put the tiremaker's horrendous 1990 behind him with vigorous cost-cutting and a stock offering that helped pare down its hefty debt. The resulting surge in profits made Goodyear shares burn rubber, with a 201% advance in market value, to \$4.2 billion.

Procter & Gamble Co. was uncharacteristically sluggish, though Gillette Co. looked sharp. It shot up 22 places, to No. 58, on the strength of its Sensor razor. Look for continued growth as it takes the Sensor into more overseas markets and rolls out a line for women. Colgate-Palmolive Co. had a similarly encouraging year, as its domestic business started catching up to its acknowledged international strength. The recent acquisition of deodorant maker Mennen Co. ought to keep Colgate moving in the right direction.

Fierce competition

Care for a Coke? Make sure you get the right one. Coca-Cola Co. added life last year, with a \$17.5 billion market-value gain. But Coca-Cola Enterprises Inc., its 44%-owned soft-drink-bottling business, wasn't so refreshing: The recession cut into sales, and fierce competition at the retail level pushed earnings down. Its worth in the eyes of investors slumped 11%. Everyone else in the beverage business, with the exception of all-star Anheuser-Busch, was flat.

When it comes to all-stars, few are more perennial than McDonald's Corp. Just as remarkably consistent as its burgers and fries, No. 43 Mickey D's hasn't moved up or down more than one place in any of the last seven years. Not so for Cracker Barrel Old Country Store Inc. The surging Cracker Barrel had the biggest gain of all in the restaurant business, shooting up 248 places, to No. 564.

Not surprisingly, the airline industry didn't have much of a year, what with the recession and war-related travel fears. American Airlines Inc. parent AMR Corp. managed to hold up better than most, gaining 42% on the strength of its long-term prospects and its decent financials. But USAir Group Inc., by contrast, is in a deep funk. Looking at its heavy debt and mounting operating losses, investors have knocked the air right out of its stock. It happened to a lot of companies last year, as the market continued its relentless winnowing of the promising from the problematic.

By Peter Finch in New York

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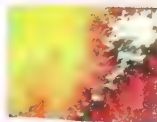
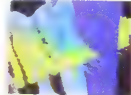
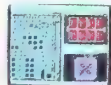
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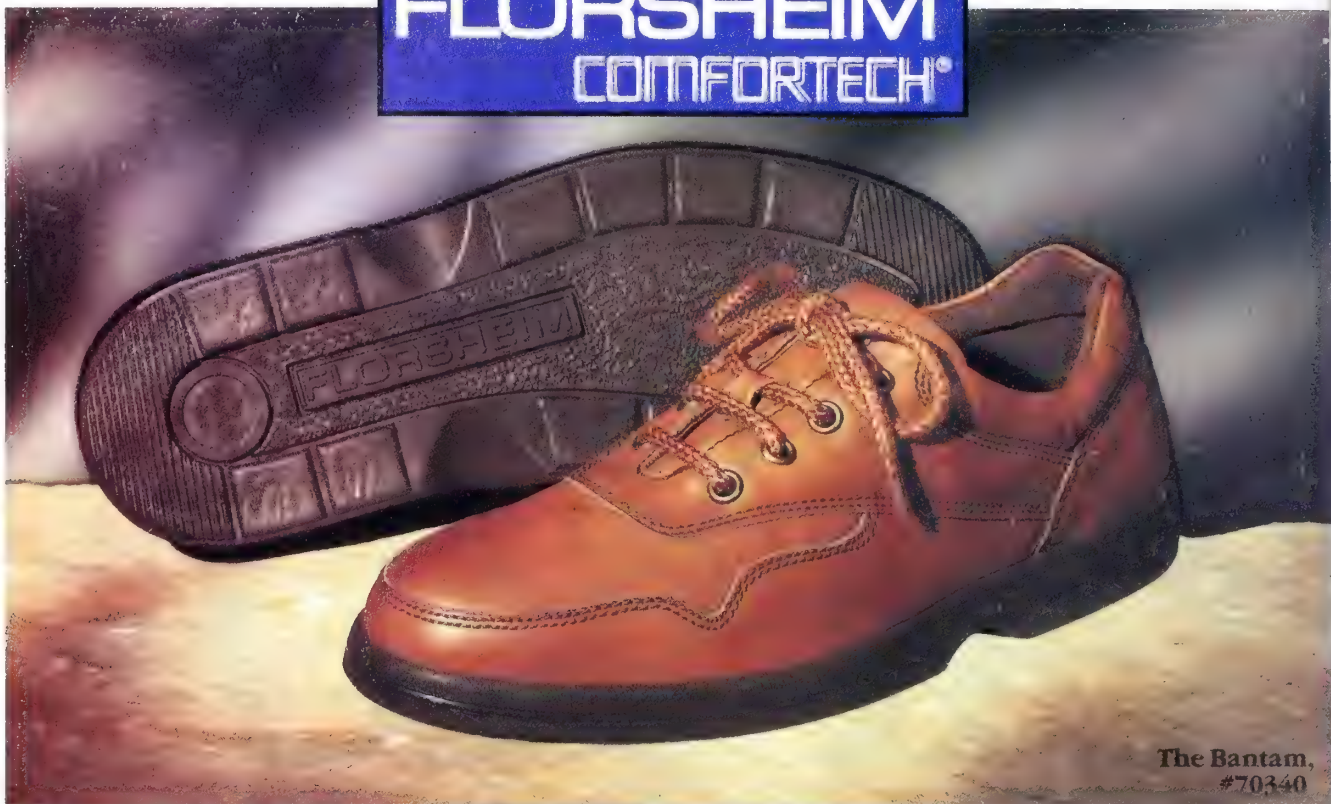
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GET COMFORTABLE!

THE LITTLE GIANTS

Chiron. Biogen. Vicor. Xoma. They sound like future destinations of the space shuttle, but that's only fitting. These and the other companies listed on page 26 are the ones investors are counting on for stratospheric growth in the future.

These are the so-called Little Giants of the BUSINESS WEEK 1000—public companies with sales of less than \$100 million. Sure, they're small, but their lofty market values put them in the same universe as the 972 other companies in this issue. That's because investors believe these companies may someday generate hundreds of millions, if not billions, in sales.

Take tiny Alliance Pharmaceutical Corp. This eight-year-old San Diego biotech company lost \$21 million in 1991 on revenues of only \$1 million. Just the same, investors boosted the stock by 257% during the same period, so Alliance has a remarkable \$597 million market value. One reason is oxygent, a substance Alliance developed to serve as a temporary blood substitute for patients undergoing surgery. If the Food & Drug Administration approves the product when it's submitted in 1993, oxygent could eventually be used in more than a million surgical procedures a year.

A potential blockbuster is also fueling interest in Centocor Inc., a biotech company based in Malvern, Pa. Thanks to an antibody called centoxin, investors have bid the value of the company up to \$1.3 billion—making it tops on the Little Giants list, with a value higher than that of tiremaker B.F. Goodrich Co. In clinical tests, centoxin has shown promising results against septic shock, a lethal bacterial infection. Prudential Securities Inc. analyst Joseph Edelman believes that centoxin could add as much as \$300 million to the company's \$53 million in sales if it gets the nod from the FDA.

Still, Centocor's stock reflects the risks in-

herent in betting on small companies. Centocor's stock price surged 180% over the last year, to 60 a share. A recent delay in FDA approval, however, coupled with legal worries over a patent-infringement battle with a fellow Little Giant, Xoma Corp., has wiped almost 50% off Centocor's share price since January. As for profits, they're still in the future. Last year, Centocor recorded the largest loss of the 28 Little Giants, a stunning \$195.6 million.

In all, 11 companies on this year's list are developing new medicines. Only one, however, is focusing on controlling health care costs: Healthcare Compare Corp. The acute need for its managed health care services has made the Downers Grove (Ill.) company the highflier of this year's bunch. Thanks to clients such as Texas Instruments Inc. and McDonald's Corp., Healthcare's sales last year rocketed 68% over the prior year, to \$71 million, while earnings soared 131%, to \$12.8 million.

You don't have to be a biotech marvel or a health care cost-saver to be a sizzling prospect. Holdovers from last year include a pair of real estate investment trusts: Weingarten Realty Investors and New Plan Realty Trust. Weingarten has benefited from the recovery of the real estate market in Houston, where the trust owns and develops shopping centers. New Plan invests in shopping centers from northern New York all the way down to Georgia. The company paid out \$1.22 a share to investors, a total of \$54.6 million, last year, despite earnings of only \$43.2 mil-

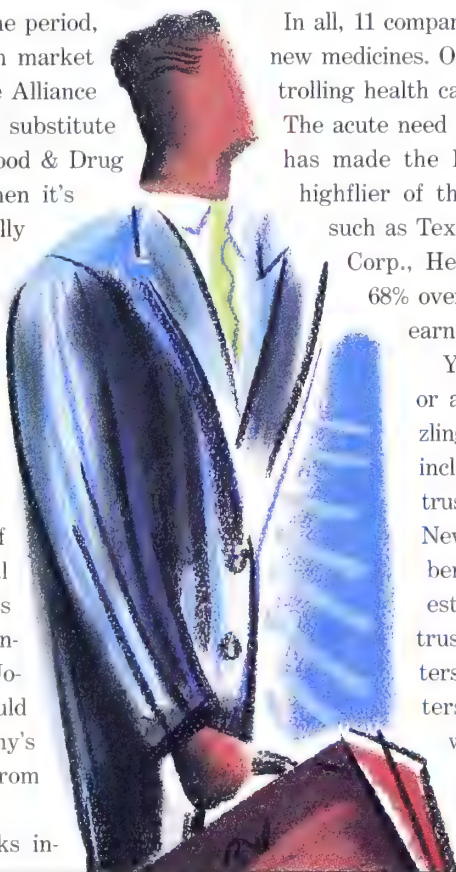
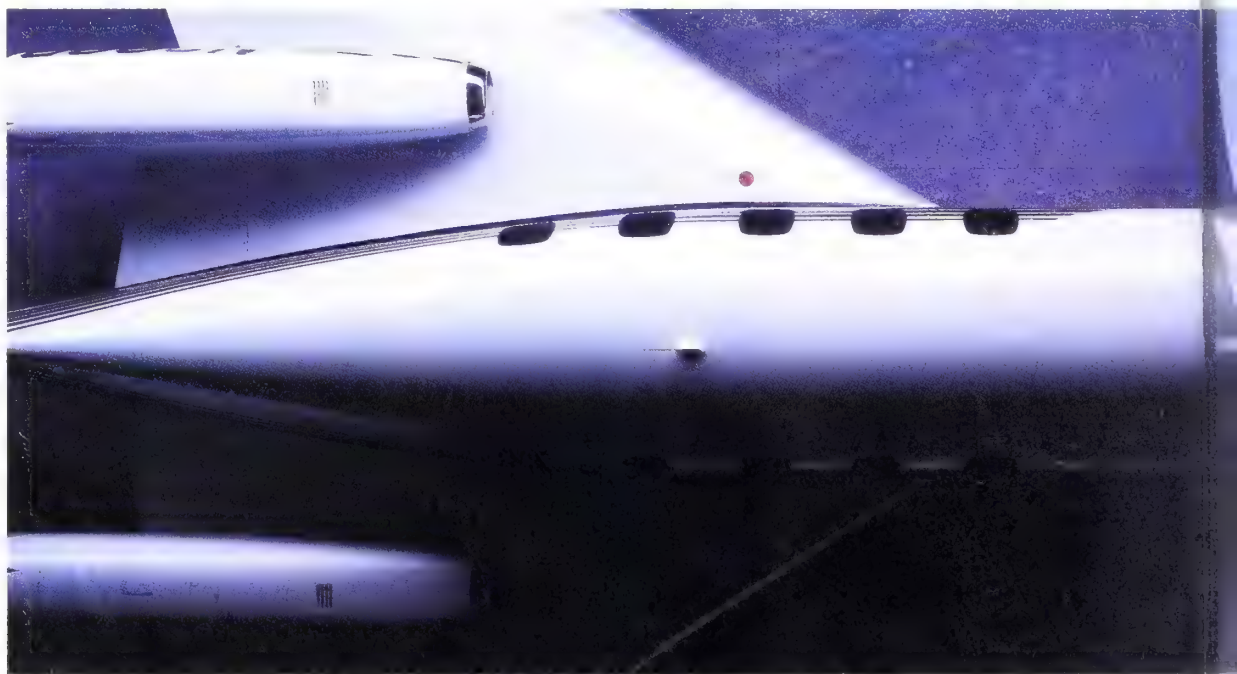


ILLUSTRATION BY ALAN REID

As you can clearly see, the Beechcraft Starship™ has an **747'S, BULLE**

interesting family tree to say the least. The avionics **WHAT DID YOU**

were inherited from the newest 747 jet. The braking system was pioneered on so



tech hardware to interior points like generous headroom and handcrafted leather

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engineers believe a business aircraft built to

survive the 21st century shouldn't have to rely

on technology built in the 1950s. This bent for

forward thinking also extends beyond high-

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STARSHIP**

ling 800-835-7767, ext. 678. Why not find out firsthand just what we're made of.

LARGER THAN LIFE

Companies with high market value and 1991 sales below \$100 million

COMPANY	MILLIONS OF DOLLARS		INDUSTRY
	MARKET VALUE	SALES	
CENTOCOR	\$1267	\$53	Drugs & research
SYNERGEN	1170	14	Drugs & research
U.S. CELLULAR	1117	99	Telecommunications
CHIRON	958	65	Drugs & research
NEW PLAN REALTY TRUST	926	60	Real estate
BIOGEN	854	61	Drugs & research
HEALTHCARE COMPARE	790	71	Financial services
VANGUARD CELLULAR SYSTEMS	742	69	Telecommunications
GENSIA PHARMACEUTICALS	730	5	Drugs & research
IMMUNEX	715	53	Drugs & research
ASSOCIATED COMMUNICATIONS	709	43	Telecommunications
AMERICAN POWER CONVERSION	708	94	Electrical products
VICOR	684	56	Semiconductors
U.S. BIOSCIENCE	655	3	Drugs & research
GENETICS INSTITUTE	627	83	Drugs & research
BP PRUDHOE BAY ROYALTY TRUST	626	93	Oil & gas
OEA	616	90	Aerospace
BALLARD MEDICAL PRODUCTS	607	41	Medical products
ALLIANCE PHARMACEUTICAL	597	1	Drugs & research
PICTURETEL	586	78	Telecommunications
WEINGARTEN REALTY INVESTORS	522	83	Real estate
ARTISOFT	519	54	Computer software
MAGMA POWER	516	95	Utilities
AMERICAN HEALTH PROPERTIES	509	80	Health care services
MEDIMMUNE	505	14	Drugs & research
HEALTH CARE PROPERTY INVESTORS	501	79	Health care services
WELLFLEET COMMUNICATIONS	476	58	Computer software
XOMA	476	17	Drugs & research

STANDARD & POOR'S COMPUSTAT SERVICES INC.

lion. The reason: New Plan has \$267 million in cash and very little debt.

Telecommunications also has a few representatives. But chances are you won't be seeing U.S. Cellular Corp. on next year's list. The cellular service carrier made the list for the third straight year, but barely squeezed under the Little Giants limit with sales of \$99 million. Although U.S. Cellular hasn't earned a penny since starting operations back in 1985, investors are salivating over the potential boom in the

U.S. cellular-telephone industry. The market now consists of 7 million subscribers, and some analysts estimate that it will grow to 35 million to 40 million by the end of the century.

Where will the other Little Giants be by then? It's too early to tell. But for now, investors are betting that with a product breakthrough here or a takeover there, the shares of these companies might rocket to the farthest reaches of the stock market heavens.

By Bruce Hager in New York

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is your insurance company
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THE NATION'S STAGE

THE
JOHN F. KENNEDY CENTER
FOR THE PERFORMING ARTS

WITH AN INTRODUCTION BY JAMES D. WOLFENSOHN

"I look forward to an America which will not be
afraid of grace and beauty."

"I look forward to an America...which will steadily
enlarge cultural opportunities for all of our
citizens, and I look forward to an America which
commands respect throughout the world not only
for its strength but for its civilization as well."

—PRESIDENT JOHN F. KENNEDY



DEWAR'S PROFILE

Denys Cowan

HOME:

New York, N.Y. "Unlike most people here, I've lived in Gotham City all my life."

AGE: 31

PROFESSION:

Graphic/comic book artist,
DC Comics.

HOBBY:

"I have more fun than anyone has a right to. A hobby would just be rubbing it in."

LAST BOOK READ:

Robert Graves, *The Greek Myths*.
"They were the original super-heroes."

LATEST ACCOMPLISHMENT:

Drew the 50th anniversary edition of *BATMAN*. "It's like being a part of history."

WHY I DO WHAT I DO:

"If you could live your dream AND draw your fantasies, wouldn't you?"

QUOTE:

"ZAP!! POW!!! %\$*! #5@* &@!!"

PROFILE:

Soft-spoken, imaginative, dedicated.
Works well in confined spaces.

HIS SCOTCH:

Dewar's "White Label," on the rocks.
"Doing an issue of *The Question* is fun, but it's still one frame at a time. Which means when I finish, a Dewar's is definitely the answer."





THE KENNEDY CENTER WAS BUILT BY A DREAM—a dream to create, in America's capital city, a national performing arts center to rival any other in the world. It would honor and encourage our country's most gifted artists, preserve our artistic heritage, teach our children the value of beauty, and carry the message and the joy of the performing arts to the broadest possible audience.

For 20 years, the Kennedy Center has done all of this and more. More than 25 million people have seen performances of music, dance, theater, and film here. Hundreds of those performances were free; thousands more were made available at reduced cost to children, senior citizens, and those with low incomes or permanent disabilities.

On Kennedy Center stages, important new works are created and extraordinary new artists are discovered. Here we welcome the best international performers and shine a spotlight on our own rich culture in regional and state festivals. Here we bestow America's highest awards for our country's artists, the Kennedy Center Honors. Here we celebrate the best of our past and see the promise of our future.

Beyond its own stages, the Kennedy Center takes its show on the road in pioneering education and outreach programs across America. Through these programs—many of which have become models for other performing arts centers—young people and their families share performances of children's theater, classical music, and dance. In schools, teachers bring the arts to life—along with lessons in history, literature, and other subjects—using skills honed at Kennedy Center workshops. And young artists are given opportunities to study and perform with professional musicians, dancers, directors, and writers.

This is the dream fulfilled. By nurturing our artists, writers, choreographers, and composers, we create a legacy of beauty for our children, and we leave our mark upon the world. By encouraging artistic exchange between our country and other nations, we foster peace and understanding. By preserving our multicultural heritage, we honor all of the people who have become Americans. And by sharing all of this with our young audiences, we educate a new generation of Americans in the ideals that have made this country great.

This is the work of the nation's stage.

JAMES D. WOLFENSOHN
CHAIRMAN
THE JOHN F. KENNEDY CENTER
FOR THE PERFORMING ARTS

INSCRIBED ON

the river facade of the Kennedy Center are the quotes on the cover of this section. They are a reminder that the performing arts make a fundamental difference in every American's life. Twenty years after its opening, the John F. Kennedy Center for the Performing Arts continues to embody that vital message — that our nation values its heritage, its culture, and its artists, and that the performing arts belong to everyone.

Senator Edward M. Kennedy, who has been a key figure in the history of the Center, both as a Congressional trustee and as a strong advocate in the U.S. Senate, puts it this way: "Artists and audiences alike have a special feeling for the Center. I'm particularly proud of the Center because it was designated as a memorial to my brother. President Kennedy had an enduring respect and appreciation for the arts. He knew their value in the context of the nation's life. I'm sure he would be gratified by the impressive success of the Center which bears his name."

Senator Mark Hatfield, another Congressional trustee and supporter, touches on the dual aspect of the Center. "As a former professor of political science, I've had a long-time interest in the office of the Presidency and all things that communicate the importance of that office within our system. It seems to me as a Presidential memorial, the Center itself is a living testimony to the nation's commitment to the arts."

Some 3.5 million people annually have come to marvel at the vast flag-festooned hallways, and at Robert Berks's 18-foot-high bust of JFK. As the nation's premier performing arts center, year after year its six theaters—ranging from 200 to 2,700 seats—present a dizzying variety of performances—all funded by ticket sales and private contributions. Contrary to popular misperception, the Kennedy Center building benefits from government funding only for maintenance of the

building's memorial areas, not the theaters. The board of trustees receives federal funding only for a portion of the Center's national education programs.

Vision has always been at the core of the Kennedy Center operations. Today, the vision has been restated and reinvigorated under the guidance of its chairman, James L. Wolfensohn. To the well-established purpose of providing excellence on stage, in supplying the finest education programs for the country's performing arts institutions

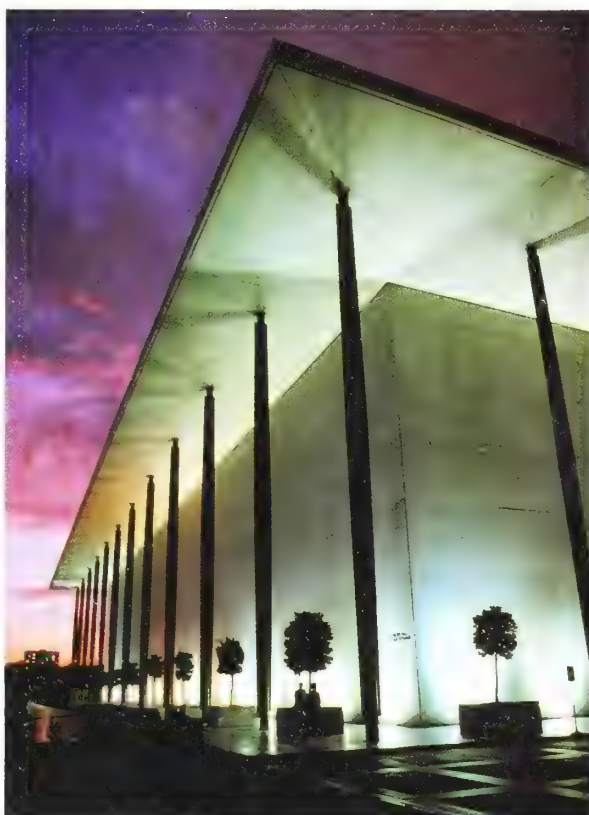
emulate, Wolfensohn has added three key goals: quality, diversity, and opportunity. They must be incorporated into every artistic and budgetary decision that is made at the Center.

The vision that sparked the Kennedy Center was of a cultural institution in the nation's capital to serve as the nation's showplace. When President Dwight D. Eisenhower signed legislation authorizing a National Cultural Center in 1958, the performing arts scene in Washington was dismal. For many diplomats, Washington duty was considered a hardship post.

When President Kennedy appointed Roger Steven

chairman of the National Cultural Center, he was putting one of the world's most successful theatrical producers in charge of a complex and ambitious project. Stevens' years as chairman of the National Council on the Arts had familiarized him with the Washington scene, so that with infinite patience he was able to deal with all the questions and problems that arose during the building of the Center and its first years.

The Kennedy Center officially opened its doors on September 8, 1971, with the world premiere of Leonard Bernstein's *Mass*, commissioned for the event at the personal request of Jacqueline Kennedy Onassis. Very quickly it became apparent that the Center was not only a superior addition to the Washington cultural map, but a performing arts center of growing national and international importance.



The Kennedy Center at sunset.

The Kennedy Center Today—The Nation's Stage

he constant balancing act at the Kennedy Center, and one that has renewed relevancy under James Wolfensohn's chairmanship, is the need to serve as a showcase for the finest in national and international performing arts and the need to serve an increasingly diverse local community. There is also a renewed insistence, under Wolfensohn, that the Center be recognized as a catalyst in the creation of new works by Americans to add to the repertoire of performing arts groups in this country and around the world.

COMMISSIONS The first product of a new Kennedy Center balancing-commissioning program featuring American creative teams (one of the mainstays of the program) was seen last June—the wildly successful *Company B* created by Paul Taylor for the Houston Ballet, to a score by the Andrews Sisters. Two more works have been premiered at the Center since then—*Age of Anxiety* by Ballet West and *American Gesture* by Pacific Northwest Ballet, to be followed by Boston, Pennsylvania, and San Francisco ballets. “In the end,” explains Sheldon Schwartz,

Kennedy Center director of programming, “all six companies will make their works and productions available, without charge, to the other five participating companies. Two more companies are benefitting from the program,” Schwartz adds. “Paul Taylor was so pleased with *Company B* that he went home and included it in his own company's New York and tour repertoire, and Lar Lubovitch is adding his *American Gesture* to the repertoire of his own company.”

Company B was unveiled during another one of Wolfensohn's innovations, state festivals—in this case Texas—at the Kennedy Center. These festivals are conceived so as to feature the best a state has to offer—from, in

this instance, the Dallas Symphony Orchestra to Rosa Guerrero's International Ballet Folklórico, based in El Paso, with the emphasis, as always, on quality, diversity, opportunity. Wolfensohn explains it this way: “You do more than present, you also stimulate the arts around the country. (For the Texas Festival,) several hundred groups auditioned; we developed a directory of all the performing artists and their

CONTINUED ON PAGE 33

“PAUL TAYLOR WAS SO PLEASED WITH *COMPANY B* THAT HE WENT HOME AND INCLUDED IT IN HIS OWN COMPANY'S NEW YORK AND TOUR REPERTOIRE.”
—SHELDON SCHWARTZ



Company B, performed by the Houston Ballet, was declared by The New York Times to be an instant classic. It proved an auspicious beginning for the Kennedy Center commissioning program.

Rosa Guerrero's International Ballet Folklórico in a special performance during the Texas Festival.

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region, and basically I think served a serious and useful purpose in putting on the front page the fact that Texas artists were performing in Washington."

HIGHLIGHTING LOCAL TALENT Making the Kennedy Center a real asset to the Washington community's diverse segments is another major goal. Wolfensohn began his community efforts last summer by encouraging the National Symphony Orchestra to raise funds for and to present five free concerts at the outdoor Carter Barron Amphitheater to reach a District of Columbia audience that traditionally has not attended NSO concerts. Artists and repertoire were tailored to the community, and the efforts were rewarded with capacity crowds. The director of cultural diversity affairs, Dr. Archie L. Buffkins, plans the New Performers Series to serve as a showcase for remarkable young Washington-area talent who have something to offer beyond traditional skills, such as a young Japanese pianist who performed works by composers of Japanese origin as well as the standard repertoire. Art forms like gospel music are beginning to be explored in some detail at the Kennedy Center; the best of the Washington area performance ensembles are invited to perform at the Center. As a way to better target the local community's many constituencies, Wolfensohn has created a new Community and Friends Board.

Behind the scenes there are the ongoing problems any aging building faces. What makes the Kennedy Center's

more complex is the dual jurisdiction: What is the responsibility of the National Park Service, which is charged with maintaining the presidential memorial, and what is the Center's? For instance, who is going to pay for altering the main areas in and around the Center to bring it into conformity with the Americans with Disabilities Act? The problems are a myriad, but problems can be solved. Meanwhile, the Center continues to draw attention and, it is hoped, stable financing from various sources, to revitalize the Center as a magnet for giving: Much of what we appreciate in the building has been donated by other countries, including the Terrace Theater made possible by a \$3 million Bicentennial present to the nation from the people and government of Japan. And the Terrace Theater has been put to remarkable use by the Washington Opera and by countless chamber musicians. The Terrace is also an inviting and intimate space to experience theater, which has had a strong place in the Kennedy Center makeup. Its most visible recent manifestation was the exhilaratingly controversial 18-month tenure of young director Peter Sellars at the head of the American National Theater project.

These days, though the theater climate in general has not been strong, the Center has done its share to enliven the situation with such undertakings as producing the current major revival of *Guys and Dolls*. Kennedy Center Managing Director Lawrence J. Wilker refers to this pro-



The hit musical *Les Misérables* made its American debut at the Kennedy Center.



Richard Thomas in Peter Sellars' acclaimed production of *The Count of Monte Cristo*.



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ducing role as the icing on the theatrical cake. What he really hopes to see is the Kennedy Center become an incubator for new works. "We've let the musical, which was America's contribution to the theater, default to England, and I think the American theater has not quite yet recovered from that. What we at the Kennedy Center are trying to do is identify young talented writers, composers, and lyricists and get them to create work in a supportive atmosphere at the Kennedy Center in order to let the artists' work prosper and grow."

MAKING A DIFFERENCE In its role as catalyst for developing new talent in the theater, the Center continues its support of the Fund for New American Plays (in conjunction with American Express and the President's Committee on the Arts and the Humanities) which has, in Wilker's words, "made a tremendous difference in the lives of many region-

al theaters in the last several years." The pioneering Kennedy Center American College Theater Festival, which showcases the best of college theater each year, involves as many as 16,000 students from 300 colleges.

As for music programming at the Kennedy Center, the National Symphony Orchestra provides the lion's share of what the institution itself presents. The Center also offers an extensive chamber music series in the Terrace Theater, which is programmed together by NSO Artistic Administrator Lois Howard in her additional role as Kennedy Center chamber music programmer. She also oversees the Friedheim Awards program for new compositions. Some 18 manuscripts are submitted annually, just to give some idea of the breadth of talent that is considered for this award.

Two of the Center's associate organizations, the Washington Opera and Washington Performing Arts Society, round out the generous music schedule for the year. The

KENNEDY CENTER FUNDING

From its beginning, the National Cultural Center was conceived as a privately funded organization. However, when the Center was designated a memorial to John F. Kennedy in 1964, Congress authorized federal funds to match the private sector contributions raised to aid construction.

Because of its dual role as a presidential memorial and national performing arts center, the Kennedy Center's present-day funding structure is unique. It often has been assumed that the Center's operations are fully funded by the federal government. While the National Park Service provides for building maintenance, security and utility expenses as it does for all presidential memorials, the Kennedy Center pays a portion of these costs, and is wholly responsible for the cost of programming, staff, and the maintenance of its theater and backstage facilities.

Kennedy Center programming is financed almost entirely by ticket sales and private sector contributions. Of an annual budget of \$57 million, earned income is consistently high, averaging 65 percent of total revenues. The balance—\$18 million—is raised from corporations, foundations, and individuals. In recent years, approximately 4 percent of the annual operations budget of the Kennedy Center has been from federal sources, and most of these

funds have been received from the U.S. Department of Education for the Center's education programs. The Kennedy Center receives no state or municipal support, but does receive the annual equivalent of \$1 million in donated services from the volunteer Friends of the Kennedy Center.

Kennedy Center Chairman James D. Wolfensohn has opened a new dialogue with the Congress about the Center's importance to this country and its national identity. He also has turned to the private sector to boost its involvement in the Center and its programs. Two new major fundraising drives designed to raise the level of giving to the Center have been initiated: the 100 Club targeted at corporations and the Trustees' Circle for individuals. Both recognize donors giving \$100,000 or more. These efforts appeal to the interests of national leaders, while inspiring donors from the private sector as well. The Center offers a wide variety of opportunities for corporations to become involved. Corporate underwriting of specific events has become increasingly attractive to corporate patrons, both supplementing and in some cases replacing traditional unrestricted philanthropy, as they seek to achieve specific philanthropic or marketing objectives and to shape a corporate image.

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Washington Opera has been around since 1957 but really came into its own when Martin Feinstein, the Kennedy Center's executive director from 1972 to 1980, came aboard as general director in 1982.

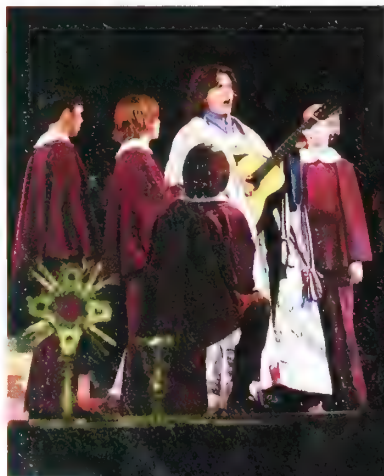
SEVENTH-LARGEST COMPANY Today, it is the seventh largest opera company in the U.S., with an annual operating budget of more than \$10 million and an attendance of nearly 103 percent. "We went from 16 performances to 48 in my first season, we went to 7 operas—and the audiences followed us. We raised our prices by a huge percentage in the second year... The audience stayed with us. At that time, the opera was playing to roughly 30,000 people; now we're playing to 100,000." The company functions as an independent entity at the Kennedy Center, renting office space and theater time, and it is unique in this country in that it performs in two theaters of differing capacity. Feinstein is justifiably proud of his accomplishments: "I think we've become a major force."

Washington Performing Arts Society (WPAS) was founded in 1964 by Patrick Hayes, who had presented concerts in Washington since 1947. Roger Stevens invited WPAS to

move its concert performances to the Kennedy Center Concert Hall, assuring Hayes that it would take up where WPAS left off. Later on, WPAS and the Kennedy Center began collaborating on a contemporary dance series as well. Today, WPAS offers some 96 performances of 74 events, has a \$5 million budget, and a substantial board. Managing Director Douglas Wheeler likes the relationship. "What makes it a little more unique is that we also use other theaters in town. We have strong ties to a lot of different communities in this city," he says.

REUNITING THE CENTER In the 20 years the Center has been a fact of American cultural life, it has offered festivals and presentations that have drawn national, even international attention. Wolfensohn has revived the international festival idea—this spring, a tribute to Germany and, in the 1992-93 season, a Celebration of the Culture of the Americas. Through these festivals, Wolfensohn believes "we can get a sense of the heritage of this country, see how that heritage has been melded into this country, and how it has been absorbed."

CONTINUED ON PAGE 14



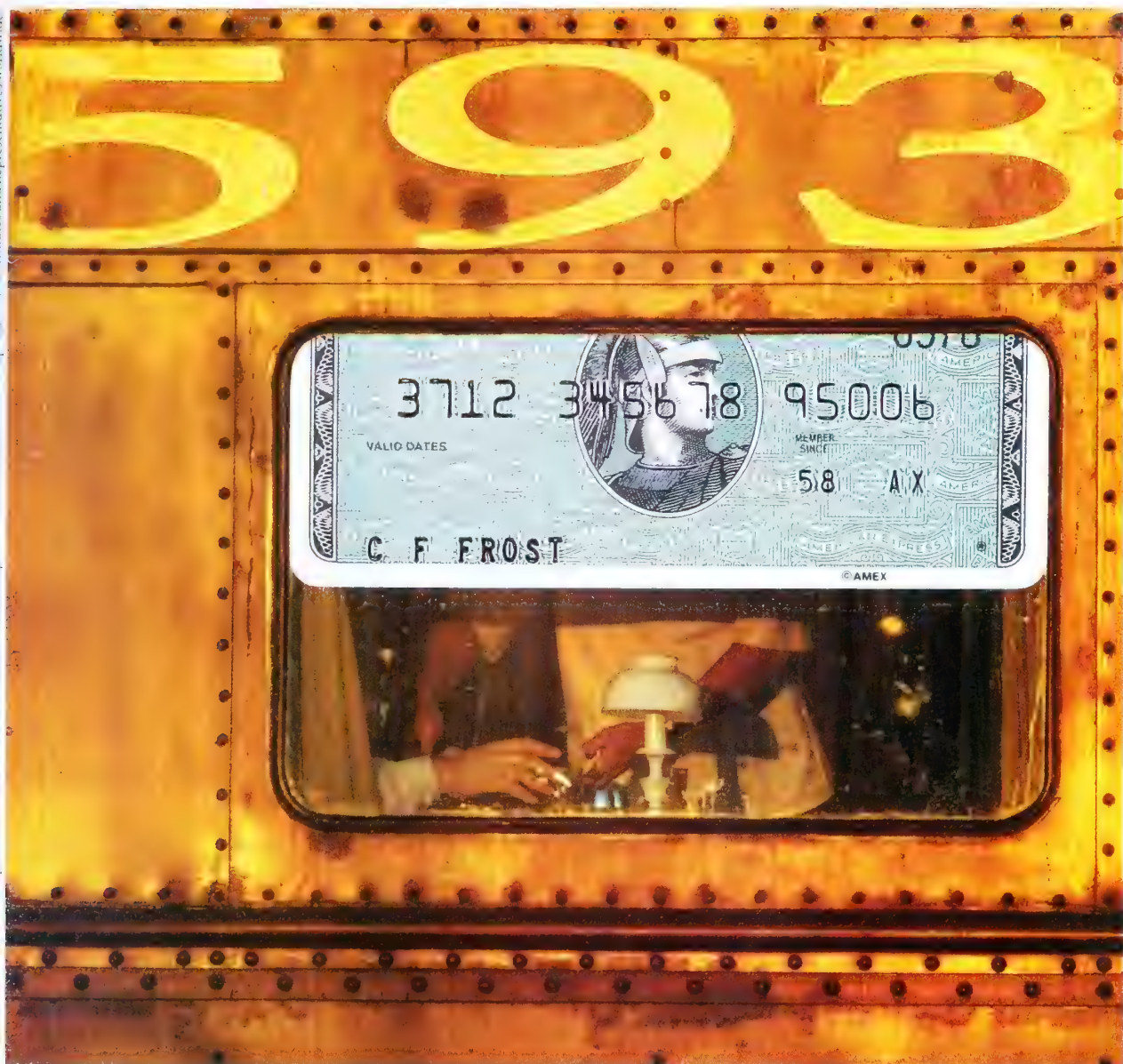
The Kennedy Center opened with Leonard Bernstein's *Mass*.



The Opera House has been praised for its exemplary acoustics and its unusual intimacy.



The Kennedy Center produced the second complete opera seen at the center in 1971—the U.S. staged premiere of Handel's *Ariodante* starred Beverly Sills (above) with Julius Rudel, the Center's first music advisor (1968–1975), conducting.



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CONTINUED FROM PAGE 12

THE KENNEDY CENTER HONORS

In 1967, the newly named founding director of the American Film Institute, George Stevens, Jr. was also serving on the planning committee of the Kennedy Center. Therefore, he and Kennedy Center Chairman Roger Stevens (no relation) would roam the steel superstructure looking for possible spaces for the AFI's 241-seat theater, which Roger Stevens wanted so that motion pictures could be included in the family of the performing arts represented at the new center. Eventually, they carved it out of backstage space for the Eisenhower Theater, and today, this institution in its own right annually shows some 400 classic and contemporary films of the highest quality—as Stevens puts it, a repertory theater in which films can be seen as they were seen when they were created. Today, the AFI operates on two coasts, under the directorship of Jean Firstenberg.

An AFI event was the germinating seed of the Kennedy Center Honors. In 1977, AFI threw a 10th anniversary bash with an all-star event at the Opera House and a reception at the White House. "After that," said George Stevens, "I went to Roger and said, 'You know, this is your place, you ought to have your own event. It

would be wonderful for the Kennedy Center to do something that the country doesn't do—honor the great artists of our nation.'"

Roger thought that was a fine idea, and he asked

me to devise it. We did, and started it in 1978. I think it was a very precise and valid concept. Things of that sort usually just take on their own life. I hesitate to say it hasn't changed because that makes it sound like it's stodgy or old fashioned, but it is very much what it was intended to be!"

Though George Stevens resigned the AFI directorship that year in order to produce the Honors as well as work on his own television and filmmaking endeavors, he continues taking part in the AFI's development in his role as co-chairman. Meanwhile, the Kennedy Center Honors have gone on to become coveted accolades for the recipients, a major fundraising source for the Center, and an outstanding Emmy- and Peabody-Award winning television special: The annual General Motors-sponsored CBS broadcast of



Massed choruses celebrate Robert Shaw at the 1991 Honors Gala.



Modern tap master Gregory Hines shares his talents at the 1991 Kennedy Center Honors.



Honorees Adolph Green, Betty Comden and Gregory Peck at the Kennedy Center Honors.

the Opera House gala has become a holiday tradition and the most visible means of bringing the Kennedy Center spirit to the largest possible audience.



"Memorial Day weekend, 1991. I was home, relaxing, having a good time. Little did I know that back at the office trouble was brewing." Last year, lightning struck the air conditioning at

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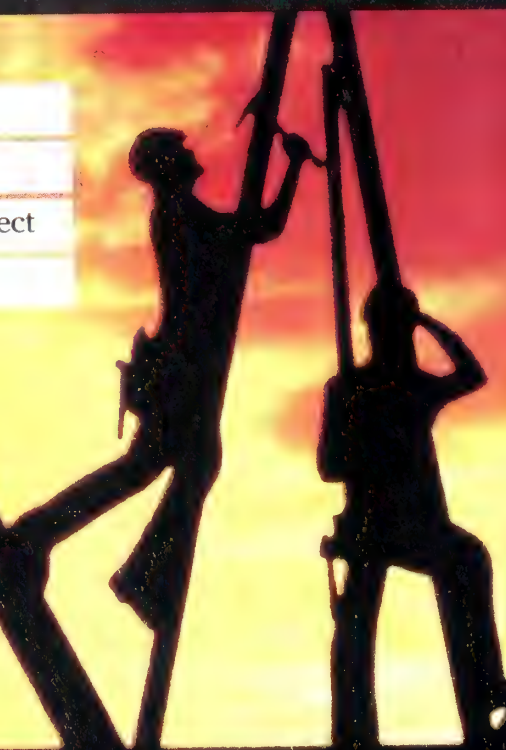
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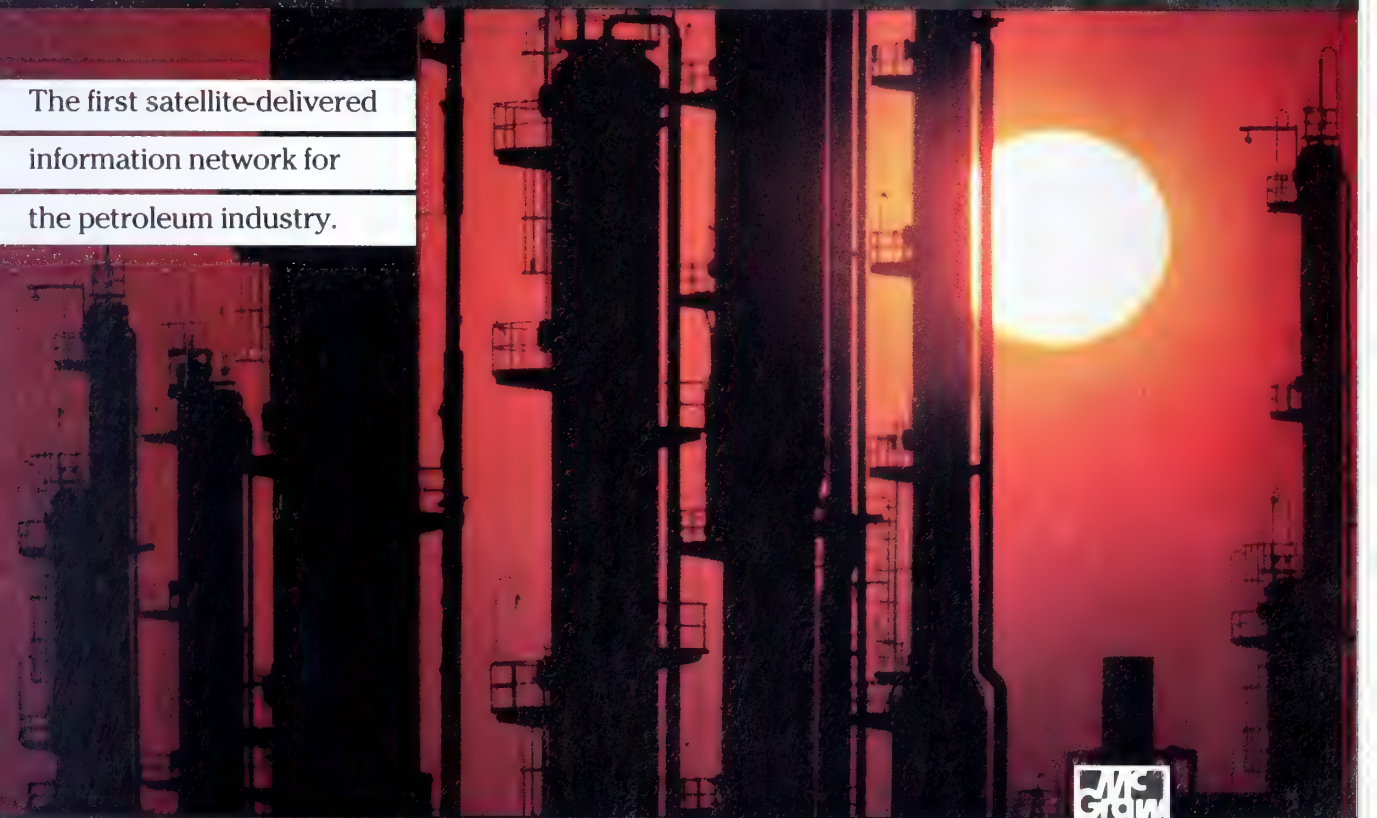
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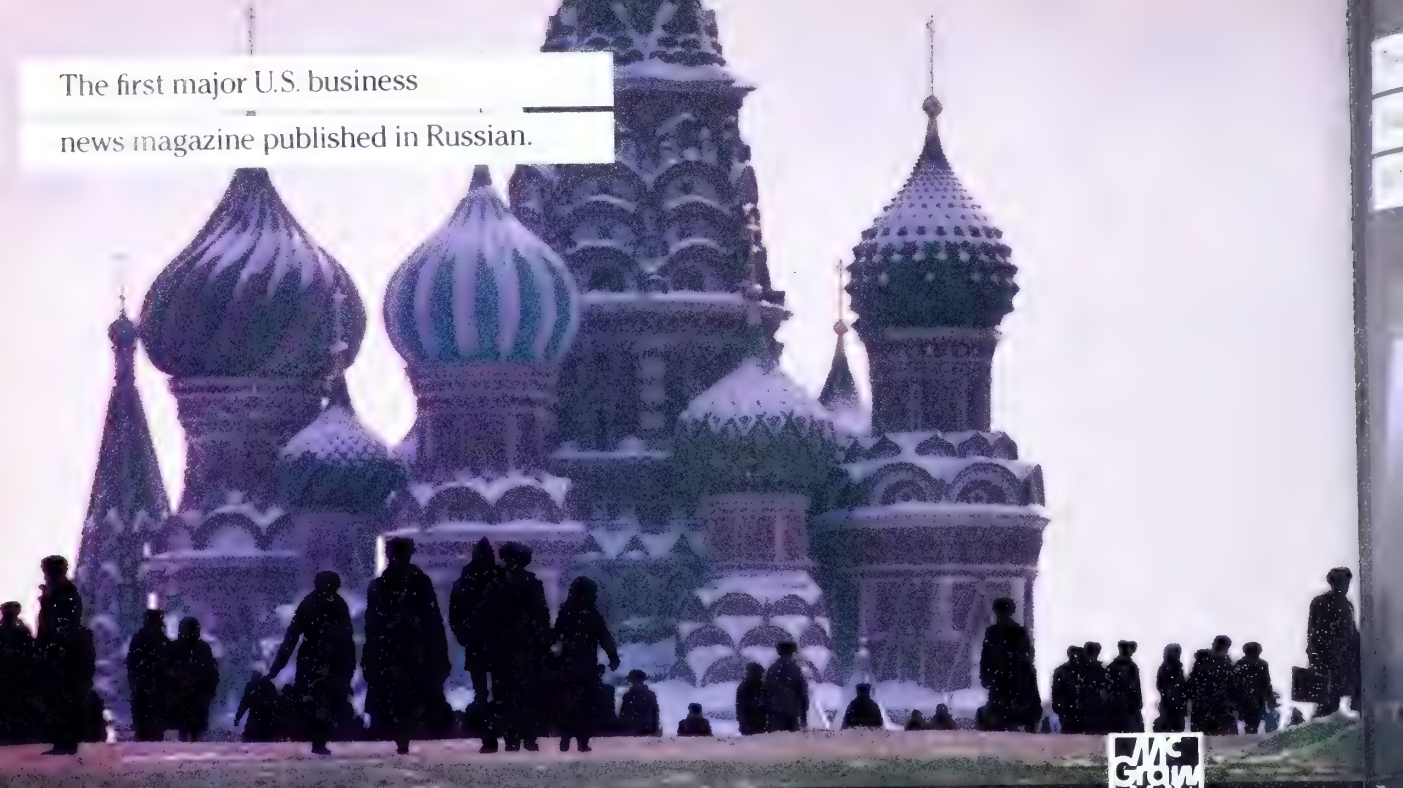
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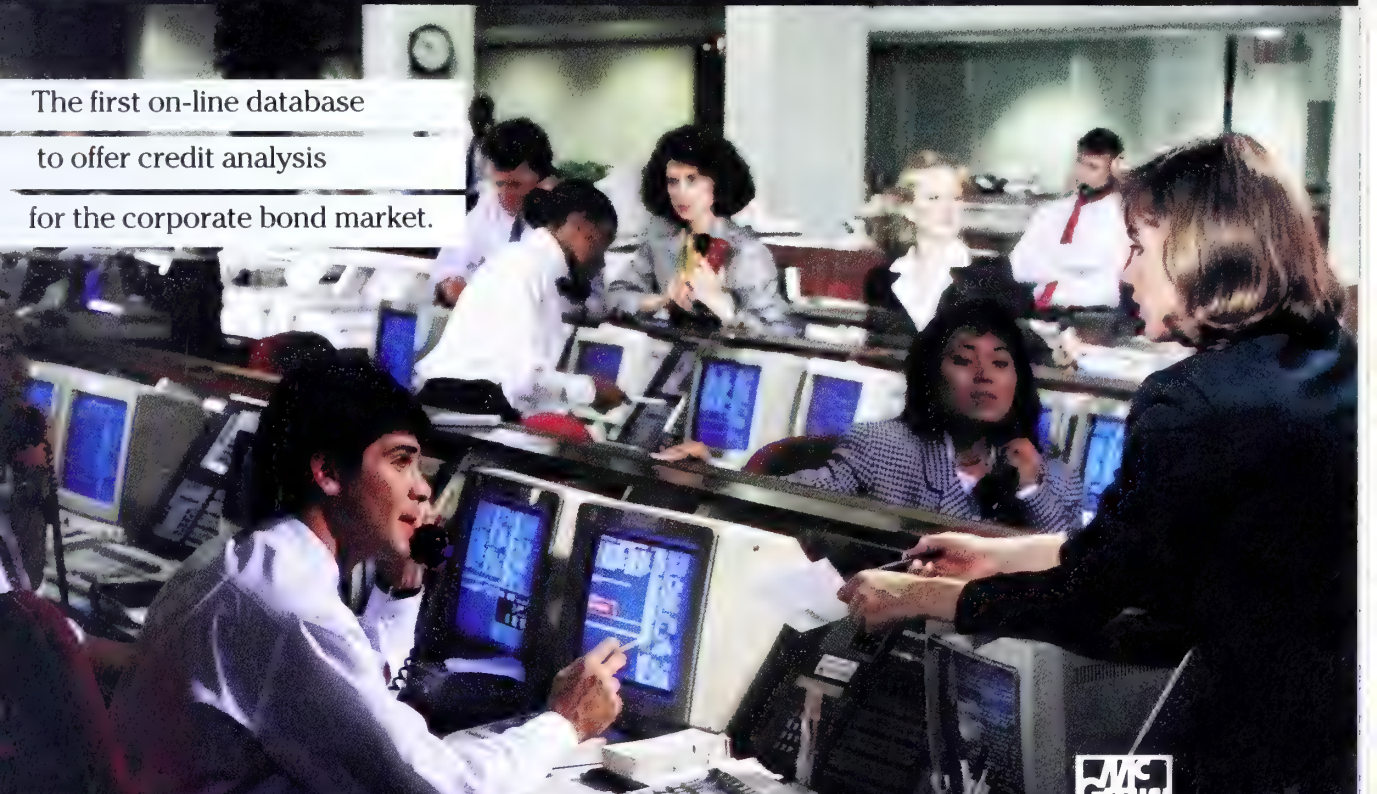
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A close-up photograph of a hand in a white sleeve holding a wooden gavel. The gavel is positioned over a thick, old book with gold-leafed pages. The lighting is dramatic, highlighting the textures of the wood and paper.

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A photograph of a busy office environment. Several people are seated at long desks, each equipped with a computer monitor. The workers are focused on their tasks, with some looking at the screens and others talking on the phone. The office has a professional, high-tech feel from the early 1990s.

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The Kennedy Center Today—The Nation's Educator

Education is equal to programming in terms of our priorities," declares Larry Wilker. "As the nation's performing arts center, we feel a very deep obligation to develop audiences and to make the arts accessible and available to all people. We think that we've lost a generation or two in this country because the arts haven't been a part of the daily lives of kids, and they haven't grown up with the performing arts. We haven't integrated the performing arts as part of our basic education. Until we can make the arts an integral part of the education system, I don't think we're going to win our audiences back."

"WE AT THE KENNEDY CENTER JUST HAVE TO KEEP SHOUTING FROM THE HOUSE-TOPS THAT THE PERFORMING ARTS MATTER!"
—JAMES D. WOLFENBORN

MULTIFORM APPROACH

The focus is on the services in the classroom, but the approach is multiform: Some programs are aimed directly at the children; others direct themselves to the teachers; still others unite the teachers to the performers.

In partnership with the Levine School of Music, the

Washington Parent Group Fund, Washington Performing Arts Society and with the endorsement of the superintendent of DC Public Schools, the Kennedy Center has helped create an Arts Enterprise Zone of five schools in the Anacostia district—a neighborhood beset by violence, poverty, and drugs. The partners are going into the schools and working with

teachers and children, providing them with opportunities to get artists into the classrooms, to attend and participate in performances. The schools were chosen to make it possible to evaluate the impact of the program on the children as they progress from elementary through high school. The mission of the program is to integrate the arts into the curriculum and thereby contribute to a learning environment that fosters positive student development. As this program evolves, the experiences of principals, teachers, students, and even the artists will refine the process.

Another citywide effort, the Cultural Passport Program,

Continued on page 2



Last summer, the National Symphony Orchestra presented five specially programmed free concerts at the outdoor Carter Barron amphitheater, to attentive and enthusiastic audiences.



The Kennedy Center Imagination Celebration offers a variety of events, indoors and out—such as this large-scale sketch-in—as part of the educational arts presentations.



The Kennedy Center commissioned Gian Carlo Menotti to write a children's opera, *A Bride from Pluto*, which was premiered in 1982.



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JAMES D. WOLFENSOHN

When James Wolfensohn was appointed chairman of the Kennedy Center in March, 1990, those familiar with his accomplishments as chairman of the board of Carnegie Hall had every reason to believe that he would be the right man for the Washington job. His background is investment banking (he is president and CEO of his own investment banking firm, James D. Wolfensohn, Inc.) His love is music, with the cello his instrument.

Carnegie had given him a chance to formulate some ideas about the arts, and his nearly two years on the new job have only lit fiercer fires under him. "We at the Kennedy Center just have to keep shouting from the housetops that the performing arts matter!"

It is Wolfensohn's firm conviction that "we are a custodian of something which has taken generations to build up, which is practiced widely in the country with performing arts centers, but which is under challenge everywhere economically and demographically. My philosophy is that this place can be part of the conscience of the nation; it can also be a custodian of the history of the performing arts; it can be a stimulus to new creative artists; it can be an enormous stimulus to performers by giving them opportunities, and it can be a leader in education both for kids and for adults. That is what we are trying to do.

"That is a pretty tough agenda when you're running a deficit of \$16 - \$18 million a year (before fundraising)

on what you're doing now. It is a pretty tough agenda in these economic times—and it is even tougher when people still have it in their heads that the performing arts are middle-class luxuries. They are not. They are what makes us different.

"I use the phrase constantly, that the performing arts are not optional extras, they are part of what makes this country different, and they are part of the educational process—not something that you do when you have done reading and mathematics and other

basic skills. There is a lot of evidence to suggest that if you have both performing and visual arts programs alongside them, the performance in the basic skills improves, that the quality of the life of the child improves, that the integration with



Chairman James D. Wolfensohn sits with President Bush at a black-tie gala in the Opera House of the Kennedy Center.

the family improves, that the alternative use of time is better spent on those things than being in the streets.

"We have to have our children understand that tough as their environment might be, that if they can get interested in the arts, they can be liberated, and that they can have a chance to perform, and to create, and to dream. That, it seems to me, is a gift you can give children that goes across ethnic and economic lines, and it would be a tragedy if that were not part of the system.

"So for the Kennedy Center, I see us as taking a lead in that fight, and doing it in a place where we can remind the administration and the Congress regularly not only by theory but by performance."

INUED FROM PAGE 20

launched by the Kennedy Center, its educational affiliate, Special Arts, and other Washington cultural partners to introduce high school students and their families to the city's cultural resources.

The National Symphony Orchestra, the Washington Opera, and ballet programs are also tremendous education-assets. The orchestra offers a much-acclaimed series of young people's concerts; the NSO also sends small ensembles into the schools for lecture-demonstrations. The opera not only brings students in for open-rehearsals, but offers with the Kennedy Center "look-ins" for a "behind-the-scenes" view at the opera as it is put on stage. The ballet companies are all expected to participate in the student programs, be they open rehearsals, student matinees, or lecture-demonstrations, and the Center offers various incentives to encourage children to come back with their parents for a performance.

IDS OF THE COMMUNITY These are but a few examples of how the Kennedy Center is developing interest in the arts at the earliest possible age. Wolfensohn observes "what we have to do is to have a very active effort that allows us to come up with innovative programs that can get

to the children and the families in an integrated way so it's not just a luxury, it's part of life."

The programs are carefully reviewed to make them responsive to the needs of the community. They then become examples for the Kennedy Center to make available nationwide to other school systems, as well as other arts institutions in other cities, as model programs. The adults involved in this entire process—the teachers, educators, arts administrators—have numerous programs designed to aid them. The Kennedy Center has day-long seminars throughout the year attended by hundreds of teachers in the greater Washington area, either to learn about a specific program or to learn more about incorporating the arts into their own classroom experiences. But the program with the most provocative national repercussions is called Performing Arts Centers and Schools, inaugurated last year.

Fourteen performing arts center administrators were invited to come to the Center, each with an adviser from his or her local school system, to learn how to devise programs that would introduce teachers and children to the performing and visual arts resources in their communities. These 14

CONTINUED ON PAGE 21



A spontaneous moment from a cultural diversity festival presented by the Kennedy Center Theater for Young People in 1989.



The annual Open House Arts Festival offers a variety of activities for children.



A National Symphony Orchestra violinist helps a youngster bow a violin at the Instrument Petting Zoo.

teams went back and, together, created nearly 100 new programs nationwide; this year those teams returned and another 14 are joining the program. Wolfensohn likens it to the ripple effect after dropping a pebble in the water: the more pebbles, the more ripples. If you keep the process going, "you don't have 100 new programs around the country, you have 1000 new programs of that type—working with the regional arts institution and the local school district."

Wilker agrees. "[You] get people to work at the local levels, with their school boards, their departments of education, to agitate and apply pressure for the incorporation of arts in the local school systems. Then you have the arts centers in each community with their school systems working hand in hand—you begin to get a synergy at the national level."

Senator Kennedy best describes the broad picture of the Center's educational outreach. "I agree with Jim Wolfensohn that the Kennedy Center should be the touchstone of arts education in the performing arts. It should be the ini-

tiator and disseminator of programs and productions that bring performing arts to teachers, young people, and the families. Jim has wonderful ideas which include touring the National Symphony Orchestra and offering master classes in areas that do not have resident orchestras. He's also working closely with the District of Columbia government

to bring economically and culturally disadvantaged schoolchildren into the Center for performances and other activities on a more regular basis.

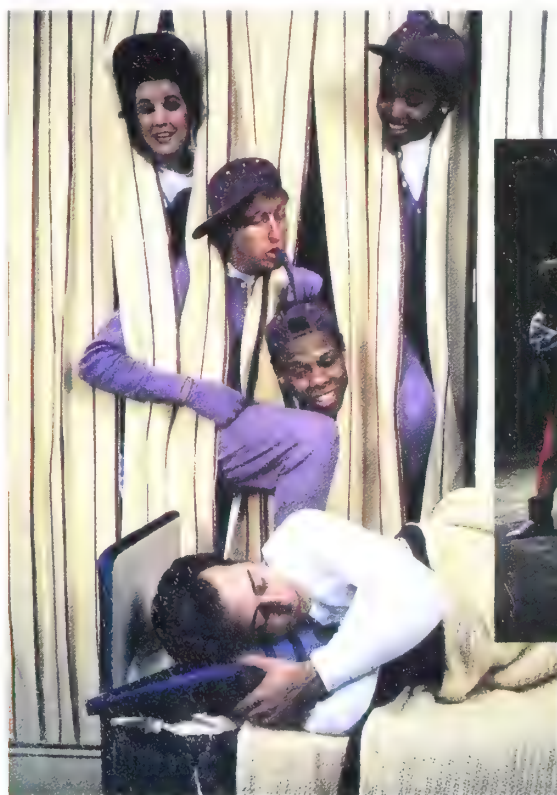
"In addition, Very Special Arts has become an education affiliate of the Kennedy Center. It was founded by my sister Jean Kennedy Smith to bring the arts into the lives of young persons with physical or mental disabilities. Very

Special Arts worked closely with the education department of the Center last year in establishing the cultural passport program for young students in the District. This is the kind of outreach which I hope will continue to grow in the years ahead."

For the Kennedy Center, education is no longer just a

**"IT IS...FORTUITOUS
THAT THE KENNEDY
CENTER IS REACHING
OUT TO HELP BUILD
THAT FOUNDATION OF
PUBLIC SUPPORT."**

—SENATOR MARK HATFIELD



Theatreworks/USA offered Harold and the Purple Crayon during the 1991 Kennedy Center Imagination Celebration.



Young audiences have experienced a variety of plays presented by the Kennedy Center Theater for Young People, from contemporary stories to classics such as The Reluctant Dragon.

ates of music, art, or dance in the schools, or simply an
t coming in and working for one week out of the year
the students. Performing arts education, and education
eneral, must be a whole community-based and commu-
-focused effort that goes beyond the classroom and
mes everybody's responsibility. Education must become
ole of the community, and arts and cultural institutions
very community must play a major role.

CRUCIAL MESSAGE The Kennedy Center has to find
y to get this message across, and powerfully, since the

quality of American education, including the arts, affects
the constituencies of all voting members of Congress. And as
Senator Hatfield observes, this is crucial, because even in
Congress, in the budget process, the arts are immediately
deemed a frill. "In these times it is sometimes difficult to
keep our commitment to the arts. It is all the more fortuitous
that the Kennedy Center is reaching out to help build a
foundation of public support. That moves us into the politi-
cal, and political people are going to be reflective of the
moods and priorities of their constituencies. If there isn't a
base out there...it's going to be more difficult to cast that vote."

NATIONAL SYMPHONY ORCHESTRA

The National Symphony Orchestra, founded in
1931, is Washington's oldest performing arts
institution. It has had its share of ups and
downs over the years, trying to survive in a city
not high on culture. Despite the expectations created
by its name, it never had the opportunity to edge
towards national
status until the
Kennedy Center
was built.

With an inter-
national-class con-
cert hall for its
home, the National
Symphony was
finally able to
attract the sort of
high-profile music
directors—first the
late Antal Dorati,
and now, Mstislav Rostropovich—who could build
the ensemble and at the same time fill halls in Wash-
ington and on tour on the strength of their names. At
home, the NSO plays some 200 performances annu-
ally, including 24 weeks of subscription concerts, plus

special events such as the free Capitol Concerts. Ros-
tropovich has brought the NSO to international promi-
nence, with major tours and recordings. He even led
the NSO to Russia on his much-publicized return to
his homeland after many years of self-imposed exile,
adding a unique luster to the institution. Says NSO



A National Symphony Orchestra Capitol Concert.

Executive Director
Stephen Klein, "The
Kennedy Center
has really catalyzed
bringing together all
the real performing
arts of the commu-
nity into one central
location, and also
with its commitment
to bringing in the
best, has changed
the face of this
city—totally

changed it. Because of our special administrative
affiliation with the center, we now have the opportu-
nity to go out and make a difference, to try to become
truly the nation's symphony orchestra and to be a
model for the entire musical industry."

20 Years of the Kennedy Center in Pictures

For more than two decades, the Kennedy Center has been presenting the finest of the performing arts nationally and internationally. The range: from grand opera in the Opera House to Grand Kabuki in the intimate Terrace Theater, from Shakespeare in the Eisenhower to Beethoven in the Concert Hall. This page captures some of the special magic that has been the Kennedy Center performance to date.



One of the great successes of the Kennedy Center American Bicentennial Theater was the 1975 revival of Kaufman & Ferber's *The Royal Family*, starring Eva Le Gallienne and Rosemary Harris.



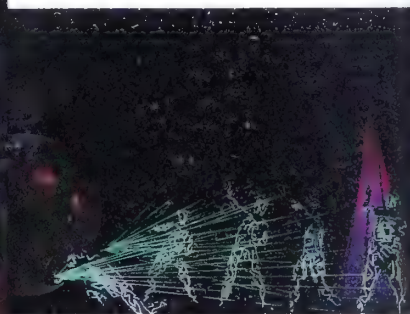
The Kennedy Center presented August Wilson's *The Piano Lesson* in 1989, before it moved on to Broadway and won a Pulitzer Prize.



The National Symphony Orchestra and Maestro Mstislav Rostropovich in Leningrad during their historic 1990 tour of the Soviet Union.



The Grand Kabuki first came to the Kennedy Center in 1979 to dedicate the Terrace Theater and has revisited the Center twice.



The Kennedy Center commissioned the Alwin Nikolais Dance Company for a new ballet for young people in 1990. The result was the futuristic *The Crystal and the Sphere*.



The Berlin Opera brought its massive production of Wagner's four-opera Ring cycle to the Kennedy Center in 1989 for two complete performances. It is interesting to note that the unit set was inspired by the Washington Metro.



The Washington Opera's current season included the American stage premiere of Jin Xiang's contemporary Chinese opera *Savage Land*.

ALL PHOTOS ARE COURTESY OF THE JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS.

JAMES HENRY JAMES

Building A National Constituency

n the vision statement Wolfensohn wrote with his management team shortly after he arrived as chairman, it is made clear that every aspect of the Kennedy Center must function with the idea that excellence and relevance Washington and the nation must animate every decision in here. He stresses, however, that he is building on the

accomplishments of the past: "I don't think any of the things I'm doing would have been possible without the work of predecessors Roger Stevens and Ralph Davidson. In fact, I'm not at a starting point. There are a lot of things that I thought needed to be changed, but the fundamental existence of this Center gives you the possibility to do the kind of dreaming and acting that I'm talking about."

For Wolfensohn, the Kennedy Center is more than just a series of stages and what goes on them. "In everything that we do here now we have an eye to how this can be leveraged nationally. It is not just for the Washington area audience. We clearly have to serve that constituency, but unlike any other organization, we always have the second question: How could this be used in Alaska, North Dakota, Wyoming? How can this be spread across the country?"

CULTURAL CONSCIENCE The Kennedy Center has to be perceived by Washingtonians, by Congress and the Admin-

istration, and by all Americans, as the nation's cultural conscience. Senator Hatfield feels the timing is just right. "I think this is the time not just to enhance and upgrade the Center's physical plant, but it is also a time to be building a national constituency. I think that is the core of Jim Wolfensohn's ideas. This support base will ensure that when the time

comes for Congressional action on [arts] appropriations or on the question of censorship, there will be a greater understanding and willingness to funnel tax dollars into the performing arts."

The Kennedy Center staff has great faith in Wolfensohn and his vision, and so do many key people on Capitol Hill, including Senator Kennedy. "Jim Wolfensohn has, without a doubt,

jump-started the Kennedy Center, and he has demonstrated the commitment and vision necessary to make the Center excel. He understands both the national leadership and the local responsibility of the Center, and he is in a unique position to ensure that the Center fulfills its dual role.

"The Center is a national memorial. It belongs to the citizens of our country; it brings great dignity to the memory of my brother. I'm grateful to Jim, as I am to his predecessors as Chairmen, Roger Stevens and Ralph Davidson, for their contributions to the Center. The Center has compiled a distinguished record thus far, and its future will be even more brilliant."



The text of this special section was written by Thor Eckert, Jr., former music critic for *The Christian Science Monitor*.

Mr. Eckert, a freelance writer, has just been named North American Editor of *Classic CD*.

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Historical Returns	1-Year Total Return (12/31/90-12/31/91)	11.54%
	Avg. Annual Return—Life (11/27/89-12/31/91)	10.12%

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CODE: BW/SCL/040392

TWO RISING STARS

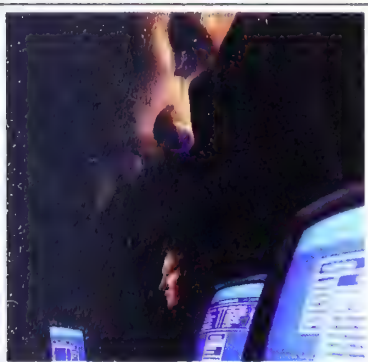
Amgen and Novell—the names don't tell much. But investors had no trouble recognizing the two: Amgen vaulted ahead in biotech, and Novell guarded its turf in software against giant rivals.

"Breathhtaking" doesn't begin to describe it. In the past 12 months, Amgen Inc., once a largely anonymous research outfit, became the world's undisputed leader in biotechnology. It has only two products: Epogen and Neupogen are both clones of naturally occurring human proteins that stimulate the production of red and white blood cells. But Amgen's profits approach \$100 million on sales of \$682 million, sending its stock skyward: Wall Street values the company at more than \$8 billion, No. 87 on BUSINESS WEEK's list of most valuable companies. That's up from No. 134 last year, well ahead of such pharmaceutical giants as Upjohn Co. and Alza Corp.



A M G E N

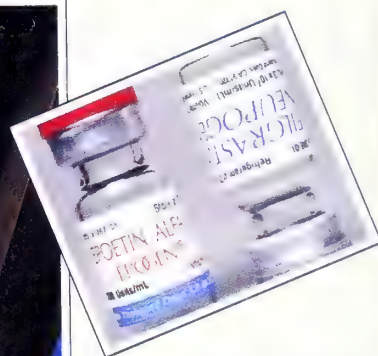
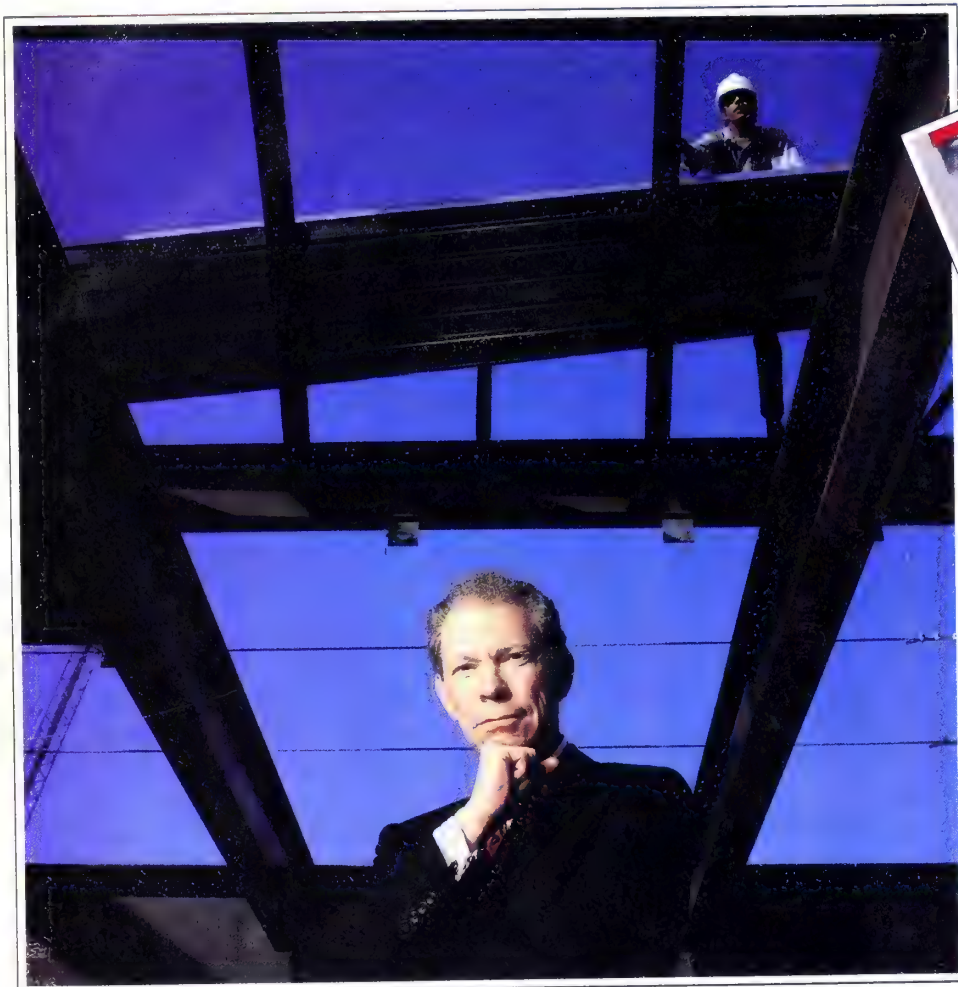
Software developer Novell Inc., meanwhile, made its heavenly trajectory by pulling off a series of well-timed moves. It exploited the growing schism between IBM and one-time partner



N O V E L L

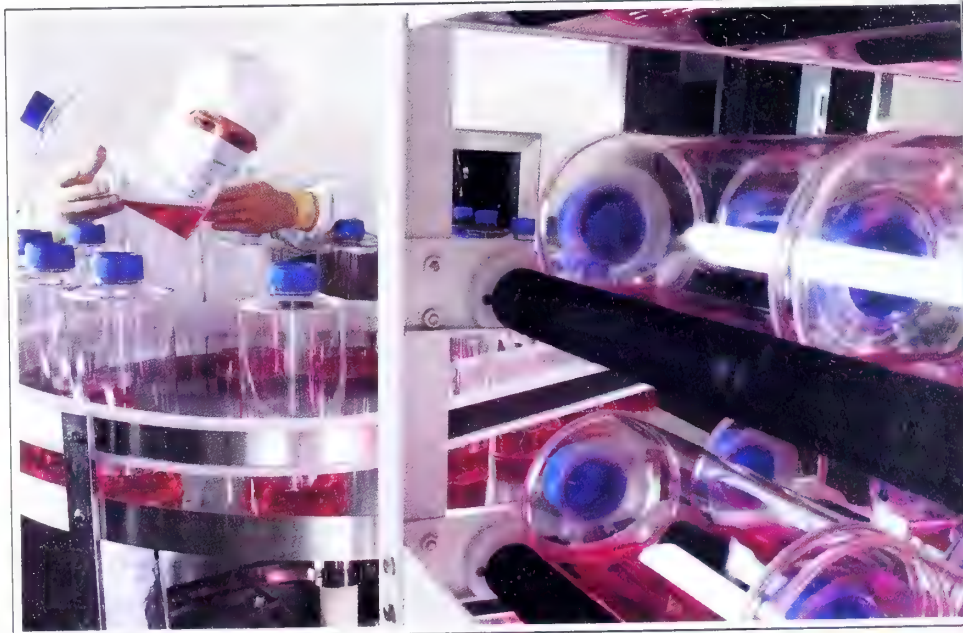
Microsoft Corp. Novell persuaded IBM to endorse its NetWare scheme for linking personal computers to mainframes and to each other. And it acquired Digital Research Inc., which makes the most popular alternative to Microsoft's bread-and-butter MS-DOS, the operating system for IBM PCs and their clones. Novell's revenues jumped 35%, profits rose 68%, and Wall Street bumped Novell up to No. 83, from No. 185, on the BW 1000.

Text by Larry Armstrong and Sandra D. Atchison



For years, Chairman Gordon M. Binder was the quintessential financial whiz: He kept researchers in funds and investors calm during the period it took Amgen to get its first product to market. In 1988, the Ford Motor Co. alum was promoted from CFO to CEO, just as Amgen's growth exploded. Now, he's running a construction boom at Amgen's motley group of buildings in Thousand Oaks, Calif. The company is adding five buildings, including a child-care center, to the 17 it occupies. With Amgen's future looking bright, it's a fitting time for that new concrete and glass to transform the bleak landscape of the onetime industrial park into something sleek.

To produce Epogen, Amgen nurtures genetically engineered ovary cells of Chinese hamsters in roller bottles that continually swish nutrients over a culture. After two weeks, the precious drug is harvested and purified. In the drug's first year, output amounted to a scant seven ounces, but that was enough to bring in nearly \$200 million in revenues. A joint venture with Japan's Kirin Brewery Co. holds the essential patents for Epogen and Neupogen, Amgen's second drug, which helps cancer patients fight infections. Kirin came up with the bottle-handling machines that allow Epogen's manufacture.





EXTRA INNINGS

any kidney dialysis patients suffer from chronic anemia—and the feeling of fatigue and exhaustion that accompanies it. But not Robert Dorval. His workouts are once again as regular as his dialyses. Epogen overcomes anemia by stimulating the bone marrow to produce new red blood cells. Dorval, a part-time Little League baseball player, had to cut back on his favorite sport at age 14, when an inherited disease caused his kidneys to fail. While his thrice-weekly Epogen injections, administered during dialysis sessions, haven't put him back on the diamond, at least the 24-year-old now has the energy to hold down a full-time job in a pizza place. And to play an occasional sandlot softball game with buddies.



► ENDGAME

Biochemist Krisztina M. Zsebo led the research team that cloned stem cell factor, the precursor to all mature blood cells. The work is likely to result in Amgen's third product, at least three years away, which would bolster chemotherapy. Amgen scientists often quit the labs to champion their discoveries all the way to commercialization. The policy ensures an intimate understanding of the drug during clinical trials, offers professional growth for the staffer, and—Amgen believes—increases its odds of success.



▲ WHAT A LIFE

The outdoor life is a year-round affair in Southern California. Amgen sponsors dozens of volleyball, softball, and basketball teams for its 1,902 employees. And most days find a cluster of workers picnicking

outside the entrance of every building. The company has grown too big for beer bashes at the founder's beach house, but it still hosts regular "fermentation seminars," which staffers allege are named for the tanks in which Amgen grows cells.



NOVELL

► LAN LORD

A decade ago, Raymond J. Noorda said computer networks would one day link the world. So Novell's CEO shucked the company's hardware products to concentrate on NetWare, a local area networking (LAN) system that interconnects personal computers. Skeptics abounded: Though NetWare dominated the market for LANs that link small corporate operations, they questioned how Novell would do when information managers chose companywide hookups connecting many LANs. Noorda has won the argument, making himself, with an 11% Novell stake, even richer. Yet Noorda still asks for senior-citizen discounts when flying on business, and is paid \$35,000. At 67, he starts work at 6 a.m., but may knock off early to go skiing. He has yet to name a successor.



◄ MORMON COUNTRY

"The heart of the company is in Utah," Noorda says. Specifically, Provo, home of many high-tech companies. Provo's appeal includes Brigham Young University and a strong work-and-family ethic, which Noorda, father of five, promotes. Employees are encouraged to invite their families to the cafeteria. Engineer Steve Jolley often eats with his wife, Judy, and daughters Jade Lyn and Sara Rose.

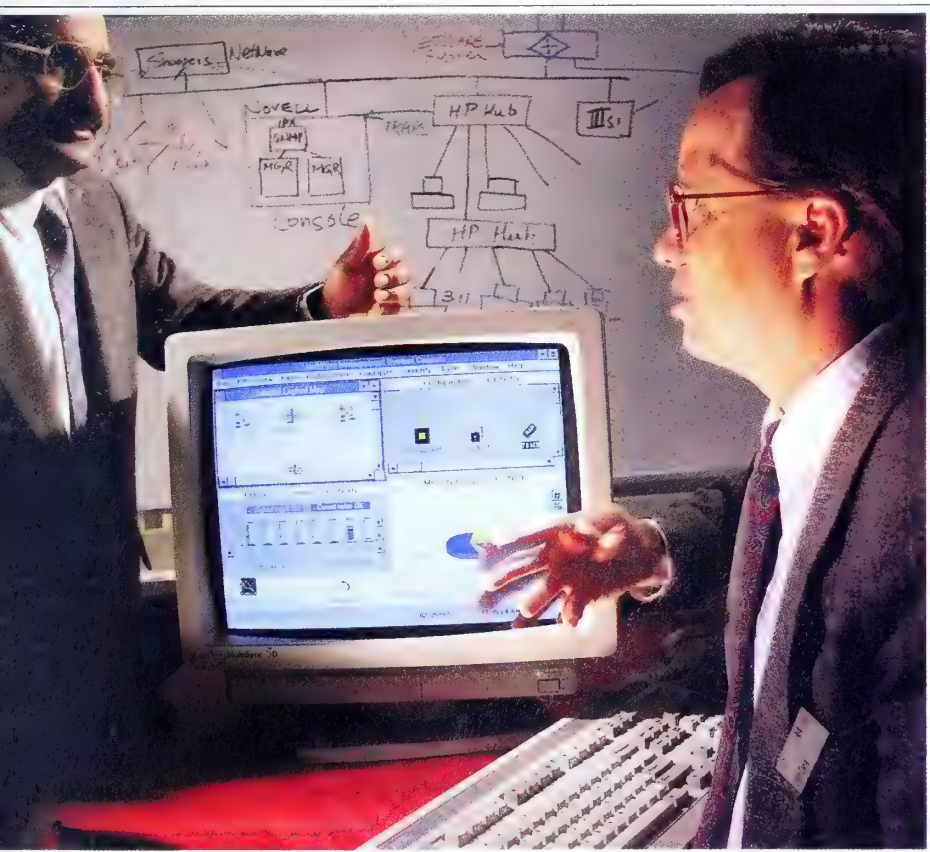


◀ FRIENDLY USERS

"Users should be driving this business," Noorda says. So Novell is building a pipeline to corporate customers via OURS—Open User Recommended Systems. Elaine R. Bond, a senior consultant at Chase Manhattan Bank, heads the 40-member user group. It will meet two to six times a year to discuss problems and needs, then report back to Novell and other vendors.

▼ STICK TO KNITTING

Novell thrives, in part, because it concentrates on what it does best: It designs, services, and supports its networking systems. Credit Mary M. Burnside, executive vice-president, for discontinuing manufacturing at Novell, which uses outsiders to make its NetWare software.

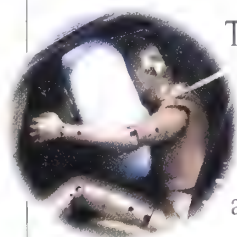


◀ CEMENTING TIES

Noorda has always believed that Novell would reap big benefits if it helped "grow the industry." That means working closely with vendors, such as Hewlett-Packard, which gain access to Novell technology as well as to its Utah Super-Lab, the industry's largest network test facility. HP's Lloyd Serra (left), meets regularly with Novell's Mukesh Sundaram, director of software engineering, to explore ways to make their products work with each other. And Novell cracked the Japanese market by forming a partnership with six Japanese computer companies to produce a Japanese language version of NetWare. Noorda's vision seems to be working: Novell has captured around 60% of the worldwide networking market—including a healthy slice in Japan.



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FOR THE 1992 SEASON
OF THE OLYMPIC GAMES
USA 

THE TOP 100 DEALS

For dealmakers, 1991 was a very forgettable year. Reeling from the excesses of the 1980s, Corporate America is clearly more interested in maintaining and streamlining its businesses than in adding to them. As corporations deleveraged and regrouped for the slower-going '90s, investment banks responded by moving their now thumb-twiddling deal mavens into other, more active areas, such as restructuring departments.

The numbers paint a vivid picture. Deals valued at \$5 billion or more were down by a third last year, to 2,116. The dollar value of last year's merger-and-acquisition activity fell 40%, to \$98 billion, on top of a 33% drop-off in 1990. And billion-dollar deals, those speculative extravaganzas of the 1980s, dwindled to a mere 19, down 39% from 1990 and 55% from their peak in 1989. For the second year in a row, BUSINESS WEEK has opted to cut its list of Top Deals from 200 to 100 (page 67). One glimmer of hope in the M&A horizon: The average deal price, in constant 1987 dollars, seems to have leveled off. After falling almost 25% in 1990, the average price for deals over \$5 million fell by just 3%, to \$162.7 million.

Last year's deal slowdown was exacerbated by the booming stock market, which took the pressure off many potential sellers. Some would-be divestitures became initial public offerings instead, fetching a higher value in the public market than they would have if sold to a private buyer. And far more of the offerings were from once-publicly traded companies that had

been part of the leveraged buyout craze of the 1980s.

Such "reverse leveraged buyouts" were a way to take advantage of the booming stock market, pay down debt, and refinance at lower interest rates. One of the premier users of leverage in the 1980s, the Wall Street firm of Kohlberg Kravis Roberts & Co., spent much of the last year deleveraging in this fashion. Among its most talked-about reverse leveraged buyouts was battery maker Duracell International Inc. But tapping the public market didn't necessarily mean cashing out entirely. For example, KKR still owns about 50% of Duracell.

For investment bankers who hadn't been laid off or reassigned to greener divisions, dealmaking lost much of its glitz in 1991. With leverage hard to come by, corporate raiders disappeared from view. "Banks have not been aggressive in providing funds for acquisitions, and where they are, they're looking for 30% to 40% in equity, as opposed to 10% in the late 1980s," notes E. Robert Cotter, managing director and head of M&A at First Boston Corp. "Financial players can't play when you're required to put 40% equity into a deal."

While there was a decidedly friendly tone to many of 1991's deals, a few hostile megadeals kept dealwatchers from nodding



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off. The biggest of the year was the skirmish set off by once-docile American Telephone & Telegraph Co., which reached out and merged with computer maker NCR Corp. With AT&T's computer business languishing, it needed NCR to inject some life into the division. After much maneuvering on both sides, NCR finally agreed to a \$110-per-share offer on May 6, and the combined entity became the fifth-largest computer maker in the U.S. As with

many of 1991's deals, the merger was structured as a stock swap, since the booming market made shares a cheap acquisition currency.

Consolidation in financial services industries added a bit of life to the dreary dealmaking scene. The competition for failed insurer Executive Life Insurance Co. caused a stir as vulture investors circled the remains of the insolvent California company. The winning bid for Exec Life's life insurance business and junk-bond portfolio came from Altus Financial and Mutuelle Assurance Artisanale de France.

Bank deals also dominated headlines. NCNB Corp. swapped stock with C&S/Sovran to expand into the Southeastern U.S., and money-center banks Chemical and Manufacturers Hanover joined ranks to become the third-largest bank in the U.S. Still pending is the proposed acquisition of Security Pacific Corp. by BankAmerica Corp., which would vault the merged compa-

nies into the No. 2 position in the U.S.

The year's deals had a strong international flavor as well. As U.S. companies sought to position themselves as more formidable global competitors, cross-border strategic alliances were all the rage. Look for even more international deals in the years ahead. "U.S. companies are waking up to the need to become global organizations," says First Boston's Cotter. Because of privatization programs in Mexico, East-

ern Europe, and elsewhere, he adds, "there's this huge supply of businesses that are being made available in the international community at the same time that demand for them is increasing because of the perceived democratization of those countries."

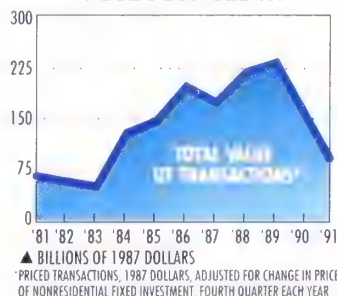
Prospects for any significant pickup in the U.S. M&A business in the near future are dim. But if the stock market suffers a correction, more foreign capital may flow in for deals, says Ken Miller, president of Lodestar Group, a New York M&A firm that works

with several international acquirers. "The U.S., whatever state it's in, is enormously attractive to foreign capitalists because of its sheer size and fluidity." But as long as lending remains tight, the stock market keeps climbing, and memories of the recession linger, U.S. companies will be more concerned with their own affairs than those of others.

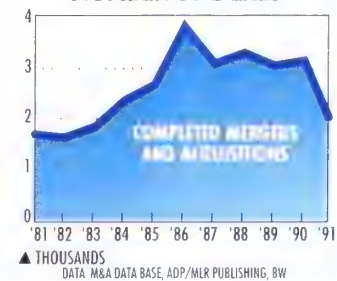
By Suzanne Woolley in New York

1991'S TALLY OF DEALS

AS TOTAL DOLLAR VALUE PLUNGED...



...SO DID THE NUMBER OF DEALS





THE TOP 100 DEALS

A guide to the biggest companies, subsidiaries, and divisions that merged, restructured, privatized, or ESOPed during 1991. The deals are ranked by announced transaction price. Inclusion in this list is determined by date transaction was completed. A special list of the largest transactions that were launched in 1991 but not completed until the first quarter of 1992, or that are still pending, appears on page 72

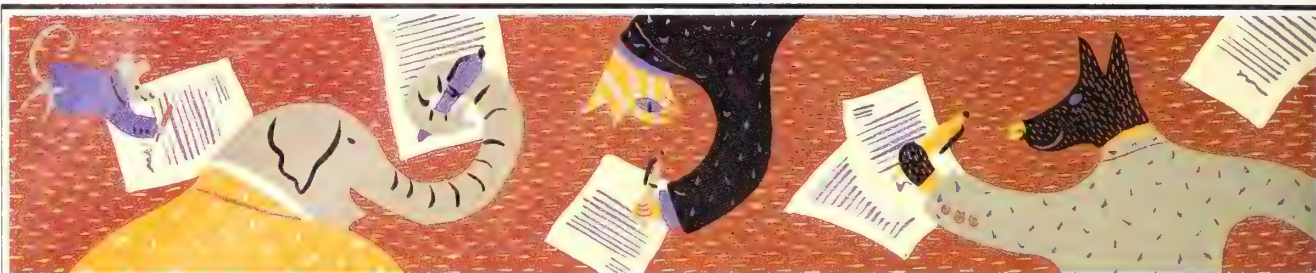
Edited by Fred F. Jespersen

	SELLER	BUYER	PRICE \$ MIL	COMMENTS
1	NCR	AT&T	7526	After much resistance, the telecommunications giant acquired the computer company it coveted in a stock swap
2	CONTEL	GTE	6600	Two independent phone companies with large cellular holdings decided to become one big independent phone company
3	MCA	MATSUSHITA ELECTRIC	6594	The Japanese electronics giant, best known in this country for its Panasonic and Technics brands, acquired the owner of Universal Pictures
4	C&S/SOVRAN	NCNB	4631	Two Southern banks, one based in Atlanta, the other in Charlotte, N. C. both with a propensity for merging, find each other. New entity is NationsBank
5	CELLULAR COMMUNICATIONS	PACIFIC TELESIS GROUP	2980	A Baby Bell established a Midwestern joint venture with a cellular phone company; PacTel acquired the right to buy its partner as well
6	MANUFACTURERS HANOVER	CHEMICAL BANKING	2693	Two New York money-center banks decided to face the world together
7	DUPONT	MERCK	2500	A joint venture in which Du Pont supplies drugs, Merck supplies management and R&D. For another Du Pont deal, see No. 18
8	SANOI	EASTMAN KODAK	2400	Another pharmaceutical joint venture, with the French company allying itself with the filmmaker's Sterling Drug
9	SQUARE D	SCHNEIDER	2230	The American maker of circuit breakers and transformers resisted the advances of its French counterpart but eventually saw the light
10	TELEFONOS DE VENEZUELA	PRIVATE GROUP	1885	GTE joined AT&T and three other companies to win the bidding for 40% of the Venezuelan phone company
11	IBM	CLAYTON & DUBILIER	1500	Big Blue exits the typewriter and printer business after a buyout led by Clayton & Dubilier and management. New company is Lexmark



	SELLER	BUYER	PRICE \$ MIL	COMMENTS
12	OCCIDENTAL PETROLEUM	ELF AQUITAINE	1350	The large French oil company bought Oxy's North Sea oil properties. For another Occidental deal, see No. 28
13	HARCOURT BRACE JOVANOVIĆ	GENERAL CINEMA	1200	The troubled book publisher needed a well-heeled friend; the owner of moviehouses and department stores had a billion or so from past asset sales to spend
14	UNITED ARTISTS ENT.	TELE-COMMUNICATIONS	1138	The big cable operator bought the 46% of a smaller cable-television outfit it didn't already own
15	FUND AMERICAN	ALLIANZ	1125	In a two-part deal, Fireman's Fund went to Germany's biggest insurance company, while Fireman's Fund's mortgage and stock portfolio was bought back by its former owner
16	MANUFACTURERS NATIONAL	COMERICA	1085	Two healthy banks decided they'd be healthier still if they joined assets
17	MACANDREWS & FORBES	PROCTER & GAMBLE	1060	Revlon's Max Factor and Betrix cosmetic lines went to the Cincinnati-based consumer-products giant, with the money going to pay down Revlon's debt
18	DUPONT	RWE	1000	The German energy company buys 50% of the chemical manufacturer's coal operation. For another RWE acquisition, see No. 34. For another Du Pont joint venture, see No. 7
19	PETER KIEWIT SONS'	VIAG	1000	The German conglomerate doubled its packaging operations with the purchase of the Omaha-based company's Continental Can Europe
20	MANPOWER	MANPOWER	909	Wheels within wheels; the British company (formerly Blue Arrow) that bought the U. S. temporary-help company was in turn bought by that same American company in a stock swap. Headquarters moves back to Milwaukee
21	SOUTH CAROLINA NATIONAL	WACHOVIA	841	Two more regional banks with healthy balance sheets team up via a stock swap, aiming to expand in the Southeast
22	ITEL	GENERAL ELECTRIC	825	The conglomerate's Genstar Container unit acquired the intermodal container leasing assets of a company best known for its rail-car leasing. For other GE acquisitions, see Nos. 43 and 46. For a GE sale, see No. 72
23	SARA LEE	ROCHE HOLDING	821	The Chicago-based consumer-products company sold its European over-the-counter drug operations to the Swiss pharmaceutical giant. For another Roche acquisition, see No. 71
24	SOUTHERN	PRIVATE GROUP	810	Florida Power & Light and Jacksonville Electric Authority completed their joint acquisition of a Georgia Power generating plant
25	GEORGIA-PACIFIC	TENNECO	727	The debt-burdened forest-products company sold corrugated container facilities and timberland to the conglomerate's Packaging Corp. of America unit. For another GP sale, see No. 73
26	SIX FLAGS	PRIVATE GROUP	700	A group led by Time Warner and the Blackstone Group rescued the amusement-park operator from its financial rollercoaster ride
27	CETUS	CHIRON	699	One biotech company bought its neighbor after Cetus hit some regulatory bumps. For another Cetus deal, see No. 71
28	OCCIDENTAL PETROLEUM	HICKS, MUSE & CO.	691	Yet another joint venture, with the oil company and the investment company operating the former Oxy natural gas businesses as Trident NGL. For another deal by Oxy, see No. 12
29	NEWS CORP.	PRIVATE GROUP	650	Kohlberg Kravis Roberts, through its K-III Holdings subsidiary, bought nine U. S. publications from Rupert Murdoch's Australia-based media company. For another KKR-related deal, see No. 31
30	PENTLAND GROUP	REEBOK INTERNATIONAL	633	The U. S. footwear maker bought the bulk of its shares still owned by the British company that helped it get off the ground. For Pentland's sale of the rest of its Reebok shares, see No. 69

	SELLER	BUYER	PRICE \$ MIL	COMMENTS
01	BANK OF NEW ENGLAND	FLEET/NORSTAR	625	Surprise! Favored BankAmerica lost out in the bidding for the troubled Northeastern bank to a joint bid by a Rhode Island-based rival and KKR. For another KKR deal, see No. 29
02	ROCKWELL INTERNATIONAL	ALCATEL ALSTHOM	625	The high-tech conglomerate sold its Network Transmission Systems Div. to a French company looking to expand its telecommunications business
03	PHILIPS ELECTRONICS	WHIRLPOOL	611	The Dutch electronics giant, under profit pressure, sold its share of an appliance joint venture to its American partner
04	VISTA CHEMICAL	RWE	590	The U. S. chemical manufacturer joined the roster of the German energy giant. For another RWE acquisition, see No. 18
05	ORYX ENERGY	ATLANTIC RICHFIELD	588	The oil company formerly known as Sun Exploration sold its interest in California's biggest oil field to a Los Angeles-based competitor
06	UNITED BANKS OF COLORADO	NORWEST	573	Another bank merger, this time with a Minneapolis-based one buying Colorado's biggest. For another Norwest acquisition, see No. 93
07	AMBASE	PRIVATE GROUP	555	Three Scandinavian insurers, Sweden's Trygg-Hansa, Finland's Industrial Mutual Insurance, and Norway's Vik Brothers, bought the Home Group insurance companies and Wall Street's Gruntal & Co.
08	AMOCO	APACHE	543	The Denver-based oil independent doubled its oil and gas reserves with its purchase of the Amoco Production Co. from its namesake
09	HAMILTON OIL	BROKEN HILL PROPRIETARY	528	The Australian resource company bought the half of a Denver-based oil company it didn't already own
10	CYBERTEL	AMERITECH	504	Another Baby Bell buy, this time picking up a Missouri-based cellular company
11	MUTUAL BENEFIT LIFE	FORTIS	500	Seized by the state of New Jersey, the Newark-domiciled insurer's group life, health, and disability lines went to a Dutch-Belgian insurer
12	JOHN LABATT	H. J. HEINZ	500	The Canadian brewer sold its JLFoods business, a supplier of food products to restaurants and institutions, to Pittsburgh's own food giant
13	BRITISH AIRWAYS	GENERAL ELECTRIC	492	The U. K. airline sold its engine-overhauling business to the U. S. conglomerate. For other GE deals, see Nos. 22, 46, and 72
14	UNION TEXAS PETROLEUM	PACIFICORP	475	A company best known for its coal mining decided to expand its oil-and-gas business and purchased the Gulf of Mexico wells of a Houston-based energy company. For another Union Texas sale, see No. 80
15	SHELL OIL	UNOCAL	450	The Anglo-Dutch oil giant sold off a substantial chunk of a California refinery to its U. S. rival
16	BARCLAYS BANK	GENERAL ELECTRIC	450	The U. S. conglomerate's GE Capital unit went overseas to buy the third-party auto-loans business from the British bank. For other GE deals, see Nos. 22, 43, and 72
17	TWA	AMR	445	Carl Icahn's airline sold three of its London routes to American Airlines
18	ASHTON-TATE	BORLAND INTERNATIONAL	439	Philippe Kahn's software maker bought the maker of dBase
19	GOLDEN VALLEY MICROWAVE	CONAGRA	436	A maker of microwave foods, including popcorn, was gobbled up by an agricompany with an appetite for acquisitions
20	MACFIELD	UNIFI	432	These companies really know how to spin yarns. Lots and lots of yarn, now that one yarn manufacturer bought the other
21	SOUTHLAND	PRIVATE GROUP	430	This one had it all. Japanese supermarket chain Ito-Yokado and Seven-Eleven Japan bought 70% of the convenience-store company that went private in 1987. Along the way, Southland entered prepackaged bankruptcy, exited Chapter 11 in less than five months, and swapped its high-interest junk bonds for newly issued stock and bonds with a lower yield
22	ROCKEFELLER GROUP	MITSUBISHI ESTATE	416	The company that bought 51% of the owner of Rockefeller Center upped its percentage to 80% this time around
23	PAN AM	DELTA AIR LINES	416	The Atlanta-based airline bought the European routes and East Coast shuttle of its struggling rival. Later on, Delta decided against buying 45% of Pan Am as originally proposed; Pan Am subsequently went out of business. For another Pan Am sale, see No. 54
24	PAN AM	UAL	400	Another asset sale by the former airline, this time of its London routes and some 747s. For another Pan Am divestiture, see No. 53



SELLER	BUYER	PRICE \$ MIL	COMMENTS
55 BRITISH PETROLEUM	PACIFIC GAS & ELECTRIC	400	The British oil giant sold its Tex/Con oil-and-gas subsidiary to the big California utility. For a previous BP sale of Tex/Con assets, see No. 82
56 US WEST NEWVECTOR	US WEST	399	A Baby Bell bought the 19% of its cellular subsidiary it didn't already own
57 EXXON	MOBIL	393	The biggest U. S. oil company sold off its share of an Australian joint venture and some Australian service stations to its partner there
58 BANK ONE, TEXAS	BANC ONE	387	The Ohio bank bought the 61% it didn't own of the remains of MCorp, which was being held by the FDIC. For another Banc One deal, see No. 85
59 OCEAN DRILLING & EXPLOR.	MURPHY OIL	386	In a stock swap, the Arkansas-based oil company acquired the 39% of the New Orleans-based driller it didn't already own, though Ocean resisted at first, hoping for a sweetened offer
60 TONKA	HASBRO	378	The maker of G. I. Joe and Mr. Potato Head grabbed a toy-truck and game maker that was in a financial squeeze
61 JOHNSTON COCA-COLA BOTTLING	COCA-COLA ENTERPRISES	375	The Coke spin-off acquired a big Coke bottler and its management, in the process upping its share of the market to 55%
62 SEAGRAM	AMERICAN BRANDS	372	A Canadian company best known as a distiller sold seven of its hard-liquor brands to the U. S. maker of Jim Beam bourbon
63 BEATRICE FOODS	MERRILL LYNCH	367	The Merrill Lynch Capital Partners unit of the big brokerage bought the Canadian segment of the big food LBO of 1986; the Canadian operations had in turn been LBO'd in 1987
64 MCCAW CELLULAR COMMUN.	BELLSOUTH	360	The large Southern Baby Bell bought cellular properties in Illinois, Indiana, and Wisconsin from Craig McCaw's cellular-phone company
65 MANNESMANN	DIGITAL EQUIPMENT	340	The Massachusetts computer maker acquired the German industrial company's computer operations
66 JAMES RIVER	PRIVATE GROUP	337	AEA Investors, a group consisting mostly of retired CEOs, joined management in taking the specialty papers segment private
67 AMERICAN FINANCIAL	PENN CENTRAL	335	Carl Lindner's insurance company sold three companies that cover otherwise uninsurable drivers to Carl Lindner's conglomerate
68 CENTEL	UTILICORP UNITED	325	The independent phone company sold electric-power operations in Kansas and Colorado to the Missouri utility. For another Centel deal, see No. 92
69 PENTLAND GROUP	PRIVATE GROUP	310	The British company sold its remaining Reebok stock to a group including First Boston and Montgomery Securities. For Pentland's other sale, see No. 30
70 MONSANTO	PRIVATE GROUP	300	The Missouri chemical maker sold the bulk of its animal-feed business to Japanese trading behemoth Mitsui and Nippon Soda
71 CETUS	ROCHE HOLDING	300	The Swiss pharmaceutical giant acquired the polymerase chain reaction (PCR) technology, patents, and product rights from the U. S. biotech firm. PCR technology allows scientists to multiply individual genes and DNA strands a millionfold. For the Cetus/Chiron merger, see No. 27
72 GENERAL ELECTRIC	SONY	300	The huge conglomerate sold its half of the RCA Columbia Home Video joint venture back to Columbia's new Japanese owner. For other GE transactions, see Nos. 22, 43, and 46
73 GEORGIA-PACIFIC	BOWATER	300	In another (partial) asset sale, the forest-products company sold 80% of two paper and pulp mills, 2 million acres of timberland, and a hydro-electric power facility to a smaller competitor. Bowater has an option to buy the remaining 20% in 1992. For another GP sale, see No. 25
74 VALID LOGIC SYSTEMS	CADENCE DESIGN SYSTEMS	287	Two San Jose (Calif.)-based companies that make software for designing chips and circuit boards decided to merge in a stock swap

	SELLER	BUYER	PRICE \$ MIL.	COMMENTS
75	GREAT AMERICAN COMMUN.	PRIVATE GROUP	280	Turner Broadcasting joined Apollo Investment Fund in buying Hanna-Barbera, producer of Flintstones and Jetsons cartoons
76	DURHAM	CAPITAL HOLDING	279	A Kentucky-based insurer acquired an insurer from North Carolina
77	SD-SCICON	ELECTRONIC DATA SYSTEMS	271	A British software maker tried to resist the GM computer services company, but a tender offer succeeded. For a friendlier EDS buy, see No. 83
78	SUPERMARKETS GENERAL	PRIVATE GROUP	265	The New England-based Purity Supreme chain of supermarkets was bought by the Los Angeles-based merchant bank Freeman Spogli
79	BANKS OF IOWA	FIRSTAR	262	A Milwaukee bank merged with one from Des Moines
80	UNION TEXAS PETROLEUM	BURLINGTON RESOURCES	260	The Houston-based oil company sold its North American onshore oil-and-gas business to the railroad spin-off. Union's Alaskan holdings were not included in the deal. For Union Texas' sale of its offshore assets, see No. 44
81	PINNACLE WEST CAPITAL	PACIFICORP	260	After failing to buy all of Arizona Public Service, the Oregon utility bought that company's Cholla-4 coal-fired generator. The deal also included an energy swap and other future power sales
82	BRITISH PETROLEUM	CENTRAL & SOUTH WEST	250	A utility from Big D bought the gas marketing, processing, and transmission business of BP's Tex/Con unit. For BP's other Tex/Con sale, see No. 55
83	MCDONNELL DOUGLAS	ELECTRONIC DATA SYSTEMS	250	The GM subsidiary picked up the aircraft manufacturer's CAD/CAM unit. For a less friendly acquisition by EDS, see No. 77
84	OFFICE CLUB	OFFICE DEPOT	246	The office-supply chain added a few more links with this acquisition
85	PNC FINANCIAL	BANC ONE	245	What goes around comes around: After losing out to Central Bancorp. in the bidding for several Ohio banks in the '80s, Banc One acquired them from Central's acquirer, PNC
86	CHEMED	MOLSON	243	DuBois Chemicals unit, a maker of cleaning chemicals, was sold to the Canadian brewer, leaving Chemed chem-less but cash-rich
87	AMERICAN STORES	PRIVATE GROUP	241	Supermarket buy-out specialists Yucaipa Food acquired the Alpha Beta stores that the Salt Lake City-based food store chain was forced to divest
88	IOWA SOUTHERN	IE INDUSTRIES	241	Two Iowa utilities decided to become one; new name is IES Industries
89	HENKEL	ECOLAB	240	The German company enlarged its stake in the U. S. industrial cleaning company, while the U. S. company formed a European joint venture with its German counterpart
90	SIGNET	AMERICAN EXPRESS	235	The U. S. financial-services company bought a British credit-card processor
91	UNION CARBIDE	MITSUBISHI	232	The U. S. chemical company sold 50% of its UCAR carbon unit, maker of carbon electrodes, to the Japanese industrial leviathan
92	CENTEL	ROCHESTER TELEPHONE	229	Two independent phone companies wheeled-and-dealed: Rochester got Minnesota and Iowa telephone operations, while Centel received Rochester stock and minority interests in 10 cellular markets. For another Centel deal, see No. 68
93	SHAWMUT NATIONAL	NORWEST	228	The Connecticut bank sold its credit-card portfolio to a Minnesota-based competitor. For another acquisition by Norwest, see No. 36
94	FNW BANCORP	NBD BANCORP	225	An Illinois bank joined a Detroit-based one
95	INTERMEC	LITTON INDUSTRIES	220	A company that specializes in bar-code technology was acquired by a company looking to diversify out of the defense industry
96	SOUTHEAST BANKING	FIRST UNION	212	A failing Florida bank was sold to the North Carolina-based super-regional
97	RIO GRANDE INDUSTRIES	GOV'T GROUP	210	The owner of the Southern Pacific railroad sold the CalTrain commuter rail line to the Peninsula Corridor Joint Powers Board, representing San Francisco, San Mateo, and Santa Clara counties. SP had threatened to shut down the rail line if it wasn't purchased
98	UNISYS	ASCOM HOLDING	207	The computer maker sold its Timeplex unit, a manufacturer of computer-networking hardware, to a Swiss telecommunications company
99	HUDIG-LANGEVELDT GROEP	AON	200	The Dutch insurance brokerage accepted a buyout bid from the Chicago-based insurer
00	DUN & BRADSTREET	PRIVATE GROUP	200	A group led by Peter Diamandis and management bought most of Donnelley Marketing, a provider of direct-marketing services

DEALS TOO LATE TO MAKE THE LIST

The 10 largest deals initiated in 1991 but still pending, or completed in the first quarter of 1992.
The criteria for inclusion otherwise are identical to those in the main list that begins on page 67

	SELLER	BUYER	PRICE \$ MIL.	COMMENTS
1	SECURITY PACIFIC	BANKAMERICA	4395	After losing a bid for Bank of New England, BofA got back in the fray by acquiring intrastate rival in a stock swap; regulators must approve, however
2	EXECUTIVE LIFE INSURANCE OF CALIFORNIA	PRIVATE GROUP	3250	A joint bid for failed insurer by Altus Finance and Mutuelle Assurance Artisanale de France; Altus will get the junk bonds, MAAF the insurance business. Several court actions must be resolved before the deal is completed
3	METRO MOBILE CTS	BELL ATLANTIC	1627	The Baby Bell tries to put together a seamless cellular network by meshing its systems with Metro's. The deal is scheduled to close in the second quarter
4	AMERICAN TV & COMMUN.	TIME WARNER	1230	The big media company bought the 18% of a cable operator it didn't already own. The deal is expected to close in July
5	AMERITRUST	SOCIETY	1168	Two Cleveland banks decided to get in on the consolidation trend; the merger was expected to close by the end of March
6	METROMEDIA	COMCAST	985	John Kluge's mini-conglomerate agreed to combine its Philadelphia area cellular interests with the owner of Muzak. The deal closed Mar. 5
7	UNITED ARTISTS ENT.	PRIVATE GROUP	700	Former UA CEO Stewart Blair and Merrill Lynch Capital Partners bought back the moviehouse chain: deal is expected to close in the second quarter
8	KING BROADCASTING	PRIVATE GROUP	698	The Providence Journal and Kelso & Co. bought five television stations and cable-TV properties of the closely held broadcasting company on Feb. 24
9	SANFORD	NEWELL	683	A maker of housewares, hardware, and office supplies bought another office supply manufacturer in a stock swap. The deal closed Feb. 14
10	GENETICS INSTITUTE	AMERICAN HOME PRODUCTS	666	The maker of Anacin, Dristan, and Maypo acquired 60% of a biotech company, with an option to pick up the rest. The deal closed Jan. 16

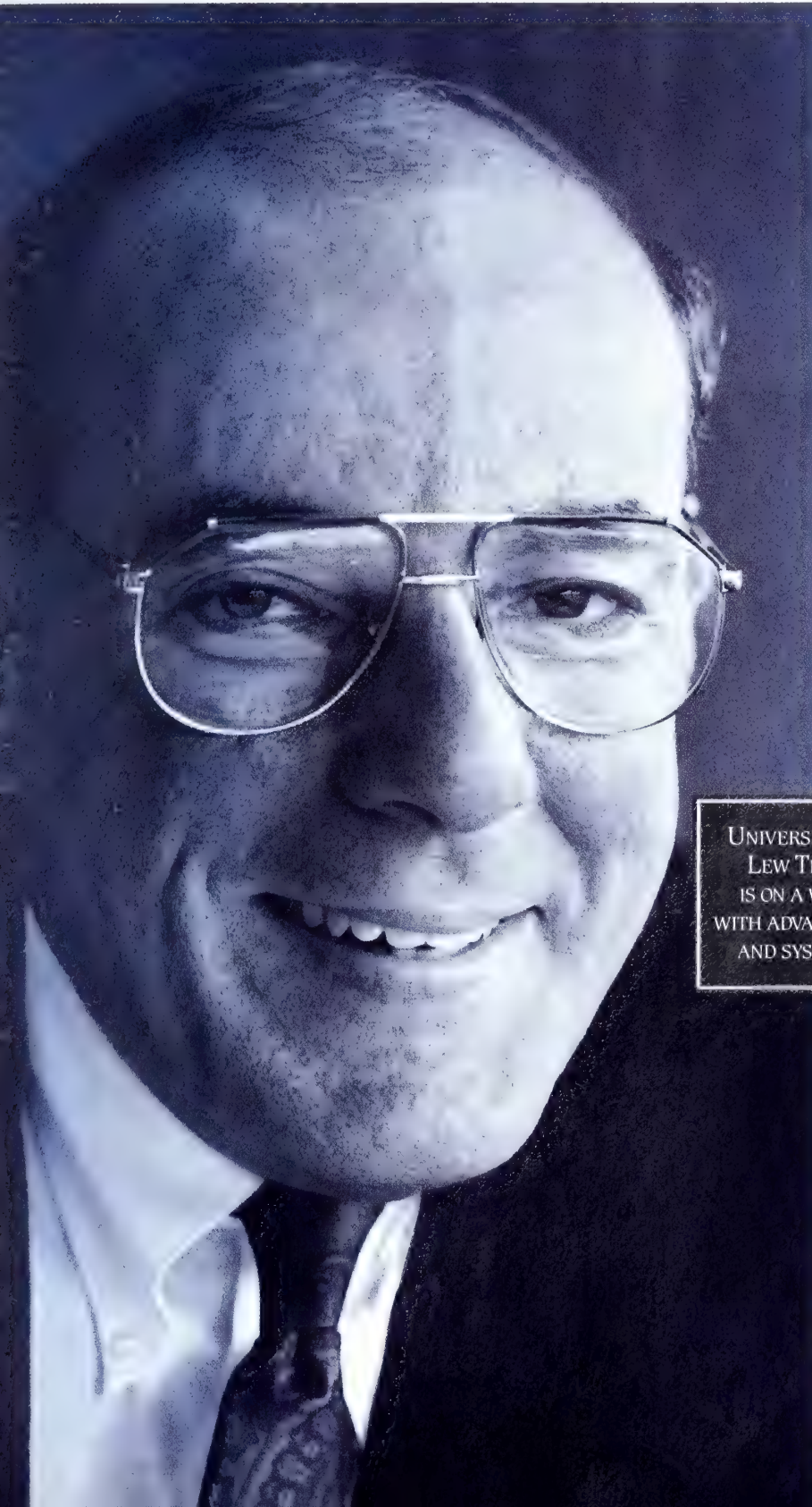
Data: MLR Publishing/IDD Information Services; Securities Data Co.; BW

THE TOP 100 DEALS ALPHABETICAL LIST OF COMPANIES

AEA INVESTORS* 66	CHEMED 86	HEINZ (H.I.) 42	MUTUAL BENEFIT LIFE 41	SIGNET 90
ALCATEL ALSTHOM 32	CHEMICAL BANKING 6	HENKEL 89	NBD BANCORP 94	SIX FLAGS 26
ALLIANZ 15	CHIRON 27	HICKS, MUSE* 28	NCNB 4	SONY 72
AMBASE 37	CLAYTON & DUBILIER 11	HUDIG-LANGEVELDT GROEP 99	NCR 1	SOUTH CAROLINA NATIONAL 21
AMERICAN BRANDS 62	COCA-COLA ENTERPRISES 61	IE INDUSTRIES 88	NEWS CORP. 29	SOUTHEAST BANKING 96
AMERICAN EXPRESS 90	COMERICA 16	INDUSTRIAL MUTUAL INSURANCE 37	NIPPON SODA 70	SOUTHERN 24
AMERICAN FINANCIAL 67	CONAGRA 49	INTERMEC 95	NORWEST 36, 93	SOUTHLAND 51
AMERICAN STORES 87	CONTEL 2	INT'L BUSINESS MACHINES 11	OCCIDENTAL PETROLEUM 12, 28	SQUARE D 9
AMERITECH 40	CYBERTEL 40	IOWA SOUTHERN 88	OCEAN DRILLING & EXPLORATION 59	SUPERMARKETS GENERAL 78
AMOCO 38	C&S/SOVRAN 4	ITEL 22	OFFICE CLUB 84	TELEFONOS DE VENEZUELA 10
AMR 47	DELTA AIR LINES 53	ITO-YOKADO 51	OFFICE DEPOT 84	TELE-COMMUNICATIONS 14
AON 99	DIGITAL EQUIPMENT 65	JACKSONVILLE ELECTRIC 24	ORIX ENERGY 35	TENNECO 25
APACHE 38	DU PONT 7, 18	JAMES RIVER 66	PACIFIC GAS & ELECTRIC 55	TIME WARNER 26
APOLLO INVESTMENT* 75	DUN & BRADSTREET 100	JOHNSTON COCA-COLA BOTTLING 61	PACIFIC TELESIS GROUP 5	TOKKA 60
ASCOM HOLDING 98	DURHAM 76	JOINT POWERS BOARD 97	PACIFICORP 44, 81	TRYGG-HANSA 37
ASHTON-TATE 48	EASTMAN KODAK 8	KOHLBERG, KRAVIS 29, 31	PAN AM 53, 54	TURNER BROADCASTING 75
ATLANTIC RICHFIELD 35	ECOLAB 89	LABATT (JOHN) 42	PENN CENTRAL 67	TWA 47
AT&T 1, 10	ELECTRONIC DATA SYSTEMS 77, 83	LITTON INDUSTRIES 95	PENTLAND GROUP 30, 69	UAL 54
BANC ONE 58, 85	ELF AQUITAINE 12	MACANDREWS & FORBES 17	PETER KIEWIT SONS' 19	UNIFI 50
BANK OF NEW ENGLAND 31	EXXON 57	MACFIELD 50	PHILIPS ELECTRONICS 33	UNION CARBIDE 91
BANK ONE, TEXAS 58	FIRST BOSTON* 69	MANNESMANN 65	PINNACLE WEST CAPITAL 81	UNION TEXAS PETROLEUM 44, 80
BANKS OF IOWA 79	FIRST UNION 96	MANPOWER 20	PNC FINANCIAL 85	UNISYS 98
BARCLAYS BANK 46	FIRSTAR 78	MANUFACTURERS HANOVER 6	PROCTER & GAMBLE 17	UNITED ARTISTS ENTERTAINMENT 14
BEATRICE FOODS 63	FLEET/NORSTAR 31	MANUFACTURERS NATIONAL 16	REEBOK INTERNATIONAL 30	UNITED BANKS OF COLORADO 36
BELLSOUTH 64	FLORIDA POWER & LIGHT 24	MATSUSHITA ELECTRIC 3	RIO GRANDE INDUSTRIES 97	UNOCAL 45
BLACKSTONE GROUP* 26	FWW BANCORP 94	MCA 3	ROCHE HOLDING 23, 71	US WEST 56
BORLAND INTERNATIONAL 48	FORTIS 41	MCCAW CELLULAR COMMUN. 64	ROCHESTER TELEPHONE 92	US WEST NEWVECTOR 56
BOWATER 73	FREEMAN SPOGLI* 79	MCDONNELL DOUGLAS 83	ROCKEFELLER GROUP 52	UTILICORP UNITED 68
BRITISH AIRWAYS 43	FUND AMERICAN 15	MERCK 7	ROCKWELL INTERNATIONAL 32	VALID LOGIC SYSTEMS 74
BRITISH PETROLEUM 55, 82	GENERAL CINEMA 13	MERRILL LYNCH* 63	RWE 18, 34	VIAG 19
BROKEN HILL PROPRIETARY 39	GENERAL ELECTRIC 22, 43, 46, 72	MITSUBISHI 91	SANOFI 8	VIK BROTHERS 37
BURLINGTON RESOURCES 80	GEORGIA-PACIFIC 25, 73	MITSUBISHI ESTATE 52	SARA LEE 23	VISTA CHEMICAL 34
CADENCE DESIGN SYSTEMS 74	GOLDEN VALLEY MICROWAVE 49	MITSUI 70	SCHNEIDER 9	WACHOVIA 21
CAPITAL HOLDING 76	GREAT AMERICAN COMMUN. 75	MOBIL 57	SD-SCICON 77	WHIRLPOOL 33
CELLULAR COMMUNICATIONS 5	GTE 2, 10	MOLSON 86	SEAGRAM 62	YUCAIPA FOOD* 88
CENTEL 68, 92	HAMILTON OIL 39	MONSANTO 70	SEVEN-ELEVEN JAPAN 51	
CENTRAL & SOUTH WEST 82	HARCOURT BRACE JOVANOVICH 13	MONTGOMERY SECURITIES* 69	SHAWMUT NATIONAL 93	
CETUS 27, 71	HASBRO 60	MURPHY OIL 59	SHELL OIL 45	

*Buyout firm or investment banker

Software Coach.



One of the finest academic institutions in the country — the University of Miami — also has the #1 college football team.

But you should really see their computer team.

Led by veteran CIO Lew Temares, the University of Miami Information Resources Department has been racking up some pretty impressive statistics of its own over the past 10 years.



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For The 90s.*

"Service levels are at a record high. Response time has been cut in half and we're always on time and under budget," says Temares.

That's what happens when you have the right leader, a hardworking team and Computer Associates software.

"Everything we do is built around CA database and systems software," says Temares.

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LEW TEMARES, PH.D.,
IS ON A WINNING STREAK
WITH ADVANCED CA DATABASE
AND SYSTEMS SOFTWARE.

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keeps all our customers happy." And the game plan for this year?

"Same as last year. Work hard and play to win."

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Software superior by design.



25 EXECUTIVES TO WATCH

The hard part was choosing just 25. In an economic environment as stormy as this one, hundreds of executives bear scrutiny among the companies of the BUSINESS WEEK 1000. This year's roster of 25 Executives to Watch is an attempt to sort out those whose careers have steered them toward the stiffest challenges—or presented them with the greatest chances for success. Neither place is particularly comfortable. These men and women were chosen because, for one reason or another, they're directly on the spot.

Perhaps the most notable aspect of this year's list is the number of executives who were called upon to fix a troubled situation. In a year of great economic stress, boards of directors throughout industry were hardly shy about replacing lackluster performers or bringing in new talent. Consider the list of those recruited for their ability to stabilize, energize, or turn around a company in flux or distress: Sally Frame Kasaks at Ann Taylor, Stanley Gold at L. A. Gear, Brandon Tartikoff at Paramount Pictures, Rob-

ert Eaton at Chrysler, and Michael Armstrong at Hughes. Eckhard Pfeiffer at Compaq and Gerald Levin at Time Warner were both tapped internally to replace fallen leaders. And Harvey Golub at American Express was promoted to help Chairman James Robinson get out of a jam.

That's not to say every company in a fix chose a change of leadership. But the chiefs of some of the nation's most important companies still have their work cut out for them. IBM's John Akers faces the challenge of a lifetime in trying to shake Big Blue loose from its bureaucracy. GM's Robert Stempel, confounded by the Japanese, has to endure the pain of slashing 74,000 employees. Boeing's Frank Shrontz must figure out how to fend off a subsidized competitor. And Caterpillar's Donald Fites somehow has to come to terms

Edited by Michael Oneal, with Thane Peterson

page	
77	BRANDON TARTIKOFF
80	WILLIAM ESREY
82	JOHN AKERS
84	STANLEY GOLD
86	MICHAEL DELL
88	THEODORE COOPER
90	DIANE PRICE BAKER
91	ROBERT STEMPEL
92	NED JOHNSON
94	GERALD LEVIN
95	FRANK SHRONTZ
96	RICHARD GELB
98	PHILIPPE KAHN
99	RICHARD ROSENBERG
100	MICHAEL ARMSTRONG
102	ROBERT EATON
103	ECKHARD PFEIFFER
104	SALLY FRAME KASAKS
105	HARVEY GOLUB
106	DONALD FITES
107	ROBERT WRIGHT
110	LAURENCE HIRSCH
111	DWAYNE ANDREAS
112	AL CHECCHI
112	GARY WILSON

with his unions. Think the heat is on? The success or failure of these four men could by itself alter the nation's trade balance for years to come.

Of course, several members of this year's group are on a roll. The challenge they face is to not screw it up. Fidelity's Ned Johnson has built a financial powerhouse that has never been more on top of its game. If he keeps his eye on the competition, it's likely to remain that way. Borland's Philippe Kahn, who manages to stay on his dirt bike as he motors to work each day, more than doubled the market value of

his software company—despite missing some major product introductions. If he really plans to challenge Microsoft—as some say he could—the software has to hit the market soon. Precocious Michael Dell, meanwhile, is teaching the world how to sell discount PCs. But at age 27, the youngest Executive to Watch had better hope his rivals haven't learned their lessons too well.

All told, it's a formidable list. Sit back, get comfortable, and read about what it's like to find yourself on the edge—of success or failure.

WHERE ARE THEY NOW: LOOKING BACK



GUTFREUND

Sometimes with fanfare, often unceremoniously, many former heads of

BUSINESS WEEK

1000 companies vanish into yesterday's news. Ever wonder what they're up to? Here's a sampling.

John H. Gutfreund, Salomon Brothers Inc.'s cigar-chomping former chairman, gets the award for last year's most visible ouster. After the Treasury Dept. caught Solly cheating at government bond auctions, he has ex-



JOSEPH

iled himself to a second home in Paris. With the Salomon probe continuing, his homecoming could well take place in a New York courtroom.

Frederick H. Joseph, the former CEO of Drexel Burnham Lambert Inc.,

knows plenty about courtrooms. After watching Drexel go bankrupt and junk-bond chief Michael Milken head

off to jail for securities fraud,

Joseph shrewdly teamed up with the Feds. His new job? A "consultant" to



CANION

Drexel in the firm's legal actions against Milken.

Hard times also dealt a blow to Joseph "Rod" Canion, co-founder of Compaq Computer Corp. He got booted last year when earnings plummeted. Now he's perusing business proposals in Houston and plans a comeback. A PC venture doesn't top his agenda.

J. Richard Munro chose his own departure date from Time Inc. when he merged the publisher with Steven J. Ross's Warner Communications. He is keeping busy as co-chairman of President Bush's



MUNRO

Points of Light Foundation. And he's active as a Time Warner Inc. director. He agreed to the ouster of his old protégé, Nicholas J. Nicholas

Jr., as heir to Ross.

Speaking of dealmakers, Donald Kelly and Gerald Tsai Jr. are making waves. Kelly, along with Kohlberg Kravis

Roberts & Co., bought Beatrice Cos. in 1986 and made millions selling off the pieces. But today he's struggling to rescue Envirodyne Industries Inc. from bankruptcy. Tsai, who says he has been looking for the perfect deal ever

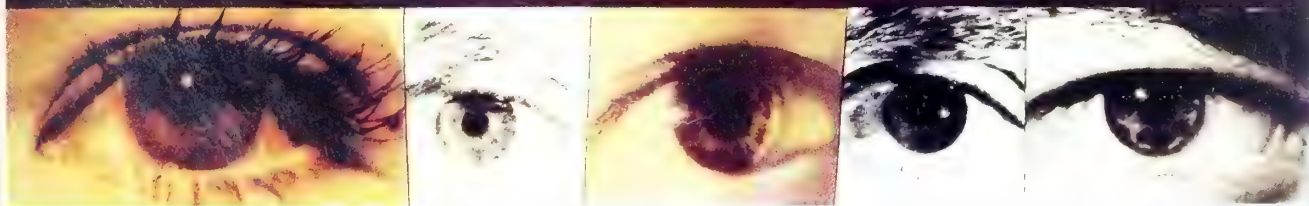
since he left Primerica Corp. in 1989, plunked down \$25 million for 44% of Delta Life & Annuity Co. in February. "Delta Life is going to be my new hobby," he says.



KELLY



TSAI





BRANDON TARTIKOFF

Tartikoff, with a rash of firings, has let everybody know who's in charge of Paramount Pictures. And with some very pricey offerings among the 19 features planned for release this year, the former TV whiz kid has definitely put himself on the line

Brandon Tartikoff has had his share of troubles. In 1981, he developed Hodgkin's disease while trying to lay the groundwork for National Broadcasting Co.'s rise to the top of the ratings charts. Then last year, he and his 8-year-old daughter were badly injured in a car wreck near Lake Tahoe. "I've never seen a strong-person," says ex-NBC Chairman Robert A. Tinker of Tartikoff's success-struggle against cancer. "He looked awful and had to wear a wig because his hair fell out. But I couldn't let him take a day off."

Tartikoff's current challenge would seem to be a breeze by comparison. But it's still the talk of Hollywood. Ever since he took over Paramount Pictures Corp. last July, wags have been asking whether the television whiz kid who gave America *The Cosby Show* and *Hill Street Blues* can transfer that magic to the big screen. More important, they wonder: Can a man whose NBC resumé includes such movie-theater flops as *Elvira: Mistress of the Dark* and *Square Dance* energize a studio plagued by management tur-

moil, cost overruns, and box office bombs?

Tartikoff, 43, will let those questions answer themselves. In the meantime, he has made sure everyone knows who's in control of Paramount. Martin S. Davis, chairman of parent Paramount Communications Inc., gave him free rein to fire most of the studio's top executives, along with 10% of its 1,100 employees. And despite his quick wit and easy manner, Tartikoff rankled some in Hollywood by lecturing old hands on how to "youthify" their movies, while stubbornly refusing to return phone calls—a definite no-no in Tinseltown.

His track record so far has been decidedly mixed. Paramount's *All I Want for Christmas*, which was hastily slapped together for about \$12 million, fizzled miserably at the box office. But then the \$14 million *Wayne's World*, adapted from NBC's *Saturday Night Live*, cleaned up all across the country. In its first three weeks, the film pulled in an impressive \$57 million.

It will probably take until summer to really see if Tartikoff has retained

his golden touch. That's when two eagerly awaited flicks hit the theaters nationwide: Tom Clancy's *Patriot Games*, with Harrison Ford, and *Boomerang*, starring Eddie Murphy. Neither is cheap, so Tartikoff has definitely put himself on the line. And you can bet Marty Davis and Paramount Communications President Stanley R. Jaffe will be watching closely.

All told, Paramount plans to release 19 films over the next year, including the latest offering in the *Naked Gun* series and a new Rodney Dangerfield feature. Tartikoff is also looking forward to producing two new syndicated shows for TV: a spinoff of *Star Trek: The Next Generation* and a show based on *The Untouchables*.

Tartikoff says he left the television network business because he "didn't want to be some guy 50 years old, trying to fix Friday night at NBC." He doesn't need to worry about that anymore. But the task of fixing Paramount Pictures under the glare of the spotlight should keep him busy seven days a week.

By Ronald Grover in Los Angeles



Virtually any business day of any week, Gulfstream IVs are seen waiting on the ramps of airports serving the major business, financial and government centers of Europe.



The range and speed of the Gulfstream IV make it ideally suited for the comparatively long distances involved in most business and government travel in the Pacific rim.

Global access and the are synonymous.

It is interesting to contemplate how many other business jet manufacturers seem to have discovered the world lately.

The fact that they are now advertising the "global" capabilities of their airplanes, of course, simply reflects their anxiety to capitalize on the changing perspectives of business as a whole.

For many major corporations, a worldwide search for opportunities has become not merely a quest for growth, but perhaps survival.

This search is also triggering deeper change. Corporate strategies to achieve global objectives are reshaping virtually everything we thought we knew about the business of doing business. If this weren't enough, the once-familiar world order is in economic, political and sociological upheaval.

And yet, for all the astonishing speed with which it is changing, the global arena is one in which deliberate, face-to-face communications between principal decision-makers are more vital to success than ever before.

That should not be surprising.

Whether it is at home or abroad, in business or in

government, personal involvement is still the constant in assessing and managing challenges. Nothing takes the place of being there and seeing things for yourself.

Which brings us back to those other business jets and our thoughts about them.

Any airplane can take you from Point A to Point B. The farther the distance between those two points, however, the more capable the aircraft has to be. If they are continents apart, it is imperative that the machine satisfies the most demanding criteria for size, range, speed, airport performance, engine reliability and systems dependability.

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Gulfstream IVs are familiar visitors at airports throughout the Middle East, and nearly every nation in the region takes advantage of Gulfstreams to conduct its affairs.



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Flight management technology superior to anything on the market, is almost universally regarded by aviation professionals as the finest aircraft of its type. This amazing business jet can fly you and 8, 10, 12 more of your key executives and staff nearly 5,000 statute miles non-stop, equalling or exceeding commercial airline timetables. It gives you global access with uncompromised timeliness, convenience and security.

It can also fly short trips efficiently and cost-effectively. You can go to places where airline service is either impractical or impossible, often visiting several locations in a single day, optimizing your time and energies.

In short, the Gulfstream IV has an uncommon

versatility that makes it uncommonly productive.

Which brings us back to the idea of being there and seeing things for yourself.

We invite you to take a first-hand look at the Gulfstream IV on an actual business trip you and your key executives need to make somewhere in the world.

You see, more than 150 of these remarkable machines are at work today, flying your peers wherever their business takes them, at home or abroad. A full-scale demonstration trip can show you the advantages they already enjoy, while you discover what global capabilities in a business jet are all about. Robert H. Cooper, Senior Vice President, Gulfstream Marketing, is the person to talk to. Call (912) 964-3234.



The Gulfstream IV.

*Uncommonly versatile,
uncommonly productive.*

WILLIAM ESREY

Sprint may have 'lost its way,' but Esrey is determined to find the road back. He is concentrating on long-distance services to homes and small businesses, where Sprint got creamed last year, and will shift first-half profits to advertising



William T. Esrey likes to tempt fate. Last year, the chairman of Sprint Corp. went to the Canadian Rockies to pursue a favorite pastime—flying to remote mountain peaks by helicopter and skiing down through deep powder snow. His wife, Julie, didn't want him to go, especially since 10 skiers had died in an avalanche while helicopter skiing the week before. Esrey went anyway. "When the helicopter lets you off, you don't know how you're going to get down," he says. "But you have no choice."

It must be a familiar feeling. With American Telephone & Telegraph Co. and MCI Communications Corp. coming on strong, the nation's No. 3 long-distance company is facing an avalanche of competition. While Sprint is fighting back, it clearly has been bogged down by high costs and erratic marketing. Its revenues last year rose only 5.2%, to \$8.8 billion, compared with a rise of almost 10% at rival MCI. "The company is losing momentum,"

says analyst Jack Grubman of PaineWebber Group Inc.: "Sprint seems to have lost its way."

Esrey, 52, is determined to find the way back. He emphasized his commitment to the company's long-distance business in February when he changed the name to Sprint Corp. from the impersonal United Telecommunications Inc. And while he won't ignore commercial accounts, he insists Sprint will concentrate anew on long-distance service for homes and businesses with single telephone lines. That's the market where the company got creamed last year.

Critics, however, fault Esrey for zig-zagging between two contradictory goals: increasing Sprint's market share and improving its profits. Last year, putting the emphasis on earnings, he slashed advertising spending 25%, prompting rivals to crank up their marketing machines to steal Sprint customers. "If I had it to do over again, I wouldn't have done that," the

Sprint executive admits. Now, he'll have to sacrifice this year's first-half profits as he gears up the advertising program all over again.

And Sprint still hasn't fully recouped from past billing snafus, although Esrey says the problems have been fixed. Mistakes on bills prompted Woolworth Corp.'s director of telecommunications, William J. Johnson, to switch to MCI in 1989. He's willing to reconsider Sprint when his MCI contract expires in 1993, but, he says, "They'll have to prove themselves again."

To help raise cash, Esrey says he would consider selling some of Sprint's local telephone companies. And he won't rule out a marriage with a company such as British Telecommunications PLC. Investors remain wary, but Esrey is confident that he can produce results. It's something like standing on top of that mountain: He really has no choice.

By Mark Lewyn in Washington and Peter Coy in New York

"We're a small human resources consulting firm, and we can't afford to make mistakes."

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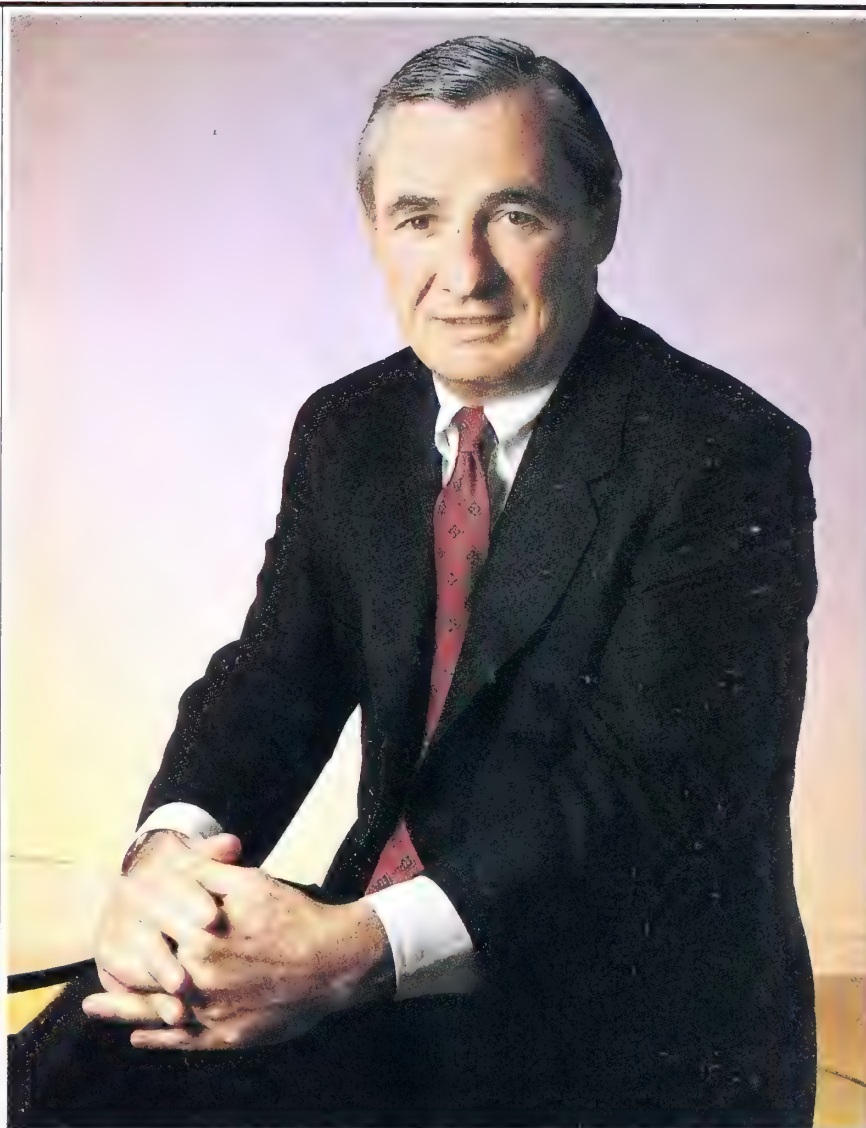
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JOHN AKERS

In pursuing his vision of a more focused, competitive IBM, Akers faces a ticklish job—decentralizing the \$65 billion monolith that it took his predecessors years to create



IBM Chairman John F. Akers used to display an almost regal persona during his infrequent public appearances. When the company briefed Wall Street analysts, for instance, he would open with a quick speech, field a few questions, and depart. But at the last such meeting, in December, Akers, 57, plunged into a crowd of analysts and reporters, determined to win over his skeptical audience. Yes, he said, his bold plan to thoroughly remake the \$65 billion computer giant would mean more pain and risk. But it would eventually yield a new and far more competitive IBM.

The stakes are rising for this ex-Navy fighter pilot as he struggles to yank IBM out of its tailspin. He turns 60 in 1994, and, if tradition holds, will retire then as chief executive. But some industry observers are beginning to ask what he'll leave behind. The company booked its first annual operating loss last year—\$564 million. And so far, creating an all-new IBM—leaner, fleetier afoot, and delivering its traditional 18% return on equity—is a goal that has eluded him in seven years as CEO. Closing plants, axing 60,000 employees, and reorganizing U.S. operations have yet to make IBM the growth machine it once was.

Now, Akers' ambitious plan is to

carve the monolithic company into a group of quasi-independent units, each of which will focus on its particular markets. They will enjoy new freedom to do what it takes to win, whether that's merely joining with other suppliers on sales calls or selling equity stakes in IBM divisions. Akers' corporate office will become essentially a holding company, setting financial goals for the mini-IBMs and managing some—but only some—of the potential conflicts between them.

It's a ticklish job that Akers faces, dismantling much of what his predecessors built in the 1970s and early 1980s. They're watching over his shoulder from seats on the board and various executive committees. Having forecast strong growth through the 1980s, they had built too many new factories and overexpanded the work force. Then, the advent of microprocessors—the

powerful chips that drive PCs and workstations—changed all the rules. Now, IBM has to compete in the high-growth PC and workstation markets while milking its \$30 billion mainframe business as long as possible. The trouble is that with each turn of the crank in technology, the desktops can do more of the mainframe's work, often at a hundredth or less of the cost.

An avid reader and sportsman, Akers has been clocking long hours trying to push his reorganization through. He has been so busy that he missed his annual winter ski trip this year. It hasn't helped that several of his top lieutenants have left the company, fueling speculation that Akers may stay on as CEO beyond 1994. Even if he does, it will be a tall order to complete the task of making IBM competitive again.

By John W. Verity in New York



John Thomas: Ford Employee

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STANLEY GOLD

Reviving L. A. Gear may be the toughest challenge yet for Roy Disney's turnaround expert. Gold must find a way to rebuild the brand's image with the fickle teenagers who were behind the company's boom in the late '80s



It's a staple of Los Angeles deal-making lore that investment bankers eager to snare the attention of Stanley Gold should show up at the UCLA track for the financier's 5:45 a.m. run with Walt Disney Co. President Frank Wells. These days, bankers who really want to catch Gold's eye should come sporting a pair of L. A. Gear sneakers.

L. A. Gear, the ailing shoemaker in Marina del Rey, Calif., is the latest challenge for Gold, Roy Disney's canny acquisition scout and turnaround expert. Through Disney's investment company, Shamrock Holdings Inc., Gold has helped revive the likes of Walt Disney Co., oil driller Enterra, and soybean processor Central Soya. But L. A. Gear may be his toughest fixer-upper yet—not the least because Gold has sunk a chunk of his own money in the deal.

Gold, 49, has been running the No. 3 sneaker maker since last September, when Trefoil Capital Investors LP paid \$100 million for a one-third stake in the capital-strapped company. Trefoil, a \$450 million partnership, was formed in

1989 with money from several sources, including Roy Disney (the nephew of Walt Disney) and Gold. Owning a piece of L. A. Gear won't change his management style, Gold insists. "You don't do this for money, you do it to win."

He's off to a fast start. Gold already has replaced L. A. Gear's brass with nearly a dozen new managers, including President Mark Goldston, a former top Reebok International Ltd. marketing executive. He has also been slashing inventory and wooing back angry retailers. The key will be whether marketing whiz Goldston and team can find a way to rebuild the brand's image with the fickle teens who were behind L. A. Gear's boom and bust in the late 1980s.

Another goal: to win a chunk of the men's athletic shoe market, where L. A. Gear stumbled badly because of shoddy shoe quality. In one embarrassing incident, an L. A. Gear sneaker worn by a Marquette University basketball player fell apart during a televised game. Gold's strategy is to downplay the tarnished L. A. Gear name, improve quality, and set prices in the

\$40 to \$120 range, a bit below those of Nike Inc. and Reebok.

Between turnarounds, Gold's passion is traveling and working with CARE USA. A director of the charity, he visits its projects around the world. He has dug ditches in Ecuador and plans a trip to Nepal next year. Primitive art on the walls of his Burbank office documents his travels: masks from New Guinea, pots from an archaeological dig near Jerusalem, and carvings from Burma.

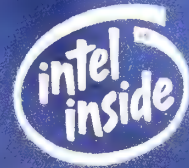
Gold doesn't draw a salary at L. A. Gear. But a Shamrock affiliate got \$3.75 million for closing the deal and will be paid \$1.8 million in consulting fees for three years. Gold is already after new acquisitions. A self-described contrarian, he's scouting hard-hit manufacturing companies, particularly consumer goods makers with health- or environment-conscious products. With so much to do, "I'm running a little out of breath," he admits. Translation: Dealmakers clamoring for his attention these days will have to run even faster to keep up.

By Kathleen Kerwin in Los Angeles

Price breakthrough! A 486 SX PC for \$1999—with "The Works!"

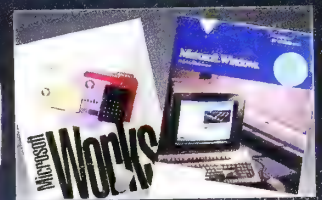
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MICHAEL DELL

In a year that was tough on earnings at IBM and Compaq, Dell Computer's revenues grew 63%. But now some formidable foes are cloning the 27-year-old CEO's direct-marketing strategy



For Michael S. Dell, the price war in the PC industry isn't brutal enough. After all, he's an expert at hawking custom-built IBM clones at lower prices than almost anyone else. As Dell sees it, the real competition has yet to begin: "I thought it would have been much more intense by now."

That's quintessential Dell. The brash 27-year-old chief executive enjoys putting the screws to rivals, especially big ones. At a time when industry stalwarts IBM and Compaq are posting terrible earnings reports, Dell Computer Corp., based in Austin, Tex., is scoring record sales and earnings with bargain-priced PCs. Bypassing dealers—the usual distribution channel—Dell keeps prices low by selling its computers through the mail and using other direct-marketing techniques.

But confidence is one thing, hubris another. Dell can't afford to get the two confused. PC makers in general are slashing prices in an effort to regain market share from Dell, and some

formidable foes are even playing copycat. Giant Digital Equipment Corp. recently entered the PC mail-order business and IBM may do the same. Then there are upstarts such as Zeos International Ltd. and Gateway 2000. These hot-growth companies sell through the mail, as well, but by offering a little less service, they have been undercutting Dell's prices significantly. "Everyone's trying to do what Dell is doing," the young entrepreneur sniffs. "But I've never seen a company do well playing catch-up."

A former computer hacker, Dell has blazed quite a trail since the days of selling clones out of his college dorm room. Revenues grew 63% last year, to \$890 million, while profits rose 87%, to \$51 million. His knack for entrepreneurship showed up early. A Houston native, Dell made \$2,000 organizing a nationwide stamp-collection auction when he was 12. And by 17, he was buying a BMW out of the \$18,000 he earned as the *Houston Post's* top sub-

scription salesman. He founded Dell in 1984, at the ripe old age of 19.

In the early days, Dell often worked 17-hour days and slept on a cot in his office. But marriage in 1989 has mellowed him. The bunk is gone, and he recently took a rare two-week vacation with his wife and new baby daughter. He couldn't resist communicating with the office daily by computer, though.

Dell needs to keep working hard. It will be difficult to drive down costs while beefing up R&D and finding new places to grow. As he expands overseas, Dell is using partners. A strong presence in Europe has driven international sales to 36% of the company's total. To help push that to 50%, Dell recently signed a deal with Xerox Corp. to distribute his machines in 19 Latin American countries. "To assume we're standing still is obviously a mistake," Dell says. A similar assumption about his rivals would be equally misplaced. *By Stephanie Anderson Forest in Dallas*



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THEODORE COOPER

Patents are expiring on drugs that accounted for half of Upjohn's 1991 profits, and Cooper must scramble to develop compounds that will fill the gap in the company's pipeline

As a former director of the National Heart Institute, Dr. Theodore Cooper knows the value of keeping fit. That's why the 63-year-old Upjohn chairman often is out of the sack by 5 a.m., heading out for an hour-long walk before he showers and hops in his Chevy Blazer for the drive to work.

Too bad his Kalamazoo (Mich.)-based drug company isn't as easy to keep in shape. Cooper is busy trying to find new compounds to make up for looming patent expirations on four drugs that accounted for roughly half of Upjohn Co.'s 1991 profits of \$537.4 million on \$3.4 billion in sales. To make matters even worse, one of those drugs is the controversial Halcion. The sleep medication has been banned in Britain and elsewhere overseas for fear that it may cause such side effects as depression. And the U.S. Food & Drug Administration is investigating whether Upjohn fudged Halcion research results—news that has devastated sales.

Upjohn has counterattacked fiercely. It denies it did anything wrong, while insisting Halcion is safe. The company has hit its British critics and news media, including the BBC, with libel suits. In the U.S., scientific evidence Upjohn has marshaled has so far persuaded the FDA to keep the drug on the mar-

ket. But Oppenheimer & Co. analyst Steven B. Gerber figures Halcion sales this year will fall at least 16%, to \$200 million.

The other drugs with patent expirations coming in 1993 and 1994 will leave even bigger holes in profits. The biggest is Xanax, an anti-anxiety drug with 1991 sales of \$595 million, followed by a diabetes treatment called Micronase and the painkiller Ansaid. All four drugs "represent a third of revenues and 50% of earnings," says analyst Ronald Nordmann of Paine-Webber Inc. Moody's Investors Service downgraded Upjohn debt in March, citing the expirations.

Cooper has beefed up research and development to search for replacements for the soon-to-be-unprotected drugs. Upjohn R&D spending in 1990 amounted to 14.1% of sales, well above the industry average of 10.3%. He's

also been forging alliances with other companies to give his salespeople more products to offer.

But so far the payoff has been disappointing. Upjohn "has among the least impressive new-drug pipelines in the U.S. drug industry," says Oppenheimer's Gerber. Cooper insists that coming new products will fill in the gaps just fine, and he points to Free-dox, which shows promise for treating head injuries. With FDA approval, it could be on the market as early as 1994. But since use would be limited, Wall Street analysts peg annual sales at a modest \$200 million. Other possibilities in view also leave Wall Street cold.

When chilly winds blew in Kalamazoo this winter, Cooper exercised on his new treadmill. Now, if he can just march Upjohn out of the storm.

By David Woodruff in Detroit



#

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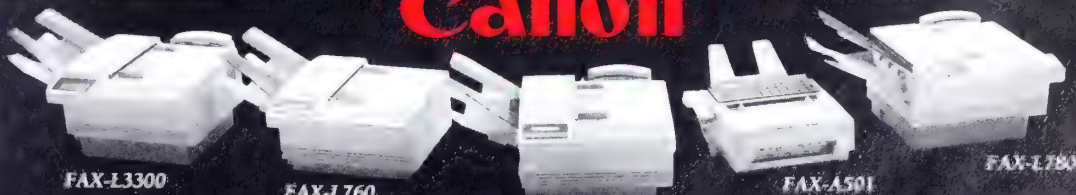


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DIANE PRICE BAKER

A parade of problems led Macy's to file for Chapter 11, and now Baker has to help the troubled retailer do an about-face. As chief debtbuster, she'll have her hands full, but, hey, that's why Macy's hired her



When Diane Price Baker left Salomon Brothers Inc. in 1990 to become chief financial officer of debt-ridden R.H. Macy & Co., her colleagues gave her a hard hat as a parting gift. She's needed it. An outspoken restructuring specialist, Baker came to Macy's to help the big retailer avoid tumbling into bankruptcy court. "But ever since I got here, I've been fighting fires," she says. Sinking under the weight of its \$3.2 billion in debt from a 1986 leveraged buyout and two acquisitions, Macy's finally filed for Chapter 11 in January. Now it's up to Baker to find a way out.

She certainly has the resumé. As an investment banker for Salomon, Baker learned the workout business by helping to untangle the capital structures of such monsters as Chrysler Corp. and the former International Harvester Co. She's the first to admit she doesn't know anything about being a merchant. But merchandising isn't Macy's big problem.

The first priority is to cut costs and restructure the debt. So Macy's has shuttered five upscale I. Magnin stores and a laggard chain of lingerie shops. To raise cash, Baker sold Macy's credit-card division to GE Capital for \$100 million. Then she set about smoothing Macy's relationships with its vendors, banks, and other creditors. Currently, she's trying to write a new business plan. And she's even spending some money. After many years in the dark ages, Macy's is getting a new computer system so it can better manage its inventory.

At 37, Baker never thought she would end up in the retail business. A surgeon's daughter, she majored in biochemistry and American history at Barnard College. She briefly considered a career in medicine, but instead headed off to Columbia B-school. "It wasn't my idea of the greatest intellectual achievement," she says of her MBA. But it prepared her to make money. "Everyone at Barnard went

into publishing where you could do your life's love but never get paid squat," she says. "I decided that if I put in a lot of work, I wanted to get paid for it."

Wall Street beckoned, and in 1978, Baker took at job at Salomon. After 10 years of pulling companies from the ashes, she moved to a job drumming up clients. Enter Macy's vice-chairman, Myron E. "Mike" Ullman III. As she tried to woo his business, Ullman was so impressed with her debt-busting ideas that he not only hired Salomon—a few months later he offered Baker a job herself.

These days, Baker takes a fairly dispassionate view of the situation. After all, she doesn't share the blame with Chairman Edward S. Finkelstein's LBO team. Still, the job she's been hired to do is far from complete. "Now I'm the client rather than the one servicing the client," she says. "I'm the one who has to stay and get it saved."

By Laura Zinn in New York



ROBERT STEMPEL

A believer in gradual change, Stempel never expected to do a bumper-to-bumper reorganization of GM. But the crisis at the auto maker forced his hand. It also pushed the intensely private engineer into a place he hates—the limelight

Robert C. Stempel abhorred the chaos caused by the 1984 reorganization of General Motors Corp.: delayed models, damaged morale, and a dramatic loss of market share. Determined to avoid a repeat, he issued a promise on Aug. 1, 1990, his first day as chairman. "We are not going to take GM apart and start over again," he said. But the next day, Iraqi tanks rolled into Kuwait, deepening an auto sales slump that continues to cause disastrous losses at GM.

This winter, Stempel was forced to kiss his promise goodbye. To cope with GM's deteriorating condition, he laid out a plan to reengineer the world's largest auto maker from bumper to bumper—including a draconian downsizing of the company. GM will shutter 11 plants and cut 74,000 employees by 1996. Some 20,000 of those cut will be white-collar workers, as Stempel takes an ax to GM's stifling bureaucracy. To cover the cost of all this, GM took a \$1.8 billion fourth-quarter restructuring charge, pushing its loss for 1991 to a record \$4.9 billion.

It wasn't how Stempel had expected

to spend his tenure as CEO. GM has a staggering 15 new cars and trucks out this year, including models such as the new Cadillac Seville and Buick LeSabre that are among its most attractive in years. But in a slump so deep, they seem lost in the shuffle. And the reorganization has thrust Stempel into a place he hates: the limelight.

The 6-ft., 4-in. engineer, who tinkers with old cars in his spare time, is intensely private. That tendency goes back to the late 1970s, when he and his wife, Pat, suffered the horror of having one of their three children kidnapped. The child was eventually returned unharmed and the kidnappers were arrested. But since then, Stempel, 58, has done all he could to stay out of the public eye.

Putting himself at center stage goes against Stempel's style, anyway. Both as head of GM's European operation, where he helped forge a turnaround in the early 1980s, and back in Detroit as head of the Buick-Olds-Cadillac Group in the late 1980s he distinguished himself as a consensus-builder. He gives authority—and credit—to his

managers. He also believes in gradual change, so the managers involved have time to buy into decisions.

Stempel concedes that GM must become leaner "as quickly as possible"—but he's not going for a quick fix. Rather than try to do everything at once, as his predecessor Roger B. Smith did in 1984, Stempel is phasing in his reorganization over two years. He's also trying to communicate better with employees. For instance, he explained his plan internally via a worldwide video hookup before going public. And he mandated that no plants will be closed with less than 15 months advance notice.

For now, time may be on Stempel's side. Thanks partly to all its new models, GM's market share is finally holding at about 35% of U.S. cars and light trucks. The company's sales should get a nice boost if the U.S. auto market turns up this year, as expected. That will help with employee morale. But with all the plant closings and layoffs, managing GM these days is a painful exercise in triage.

By James B. Treece in Detroit



NED JOHNSON

Fidelity's president has guided one of the nation's largest money-management machines to remarkable heights. But now he must fend off competition, not only from low-cost mutual funds but also brokerage firms with more flexible products

Back in the early 1980s, when Fidelity Investments was lagging Wall Street rivals in selling mutual funds, President Edward C. "Ned" Johnson III worried incessantly about the company's computer systems. He would pull all-nighters in his Boston office to pick apart new electronics, looking for better ways to invest money and serve customers. These days, though, Johnson only comes in on the occasional weekend. "Things have been running pretty well lately," he says.

That's an understatement. In fact, Fidelity's performance has been remarkable. It finished 1991 with \$156 billion in assets under management, up 31% from 1990. Nearly \$100 million a day poured into its coffers both from new customers and appreciation in its investments. Fidelity is now one of the nation's largest money-management machines, offering everything from discount brokerage services to checking accounts and credit cards. As for mutual funds, a handful has grown into 173.

Johnson, 62, can't afford to get too laid-back, however. As the undisputed mutual fund leader, Fidelity is every-

body's target. Marketers of low-cost mutual funds, such as Vanguard, are pressuring with lower fees. Then there's the stiff, margin-cutting competition in the money-market fund business. On Wall Street, brokerage firms are taking aim at Fidelity's do-it-yourself investors with more flexible investment products, such as "wrap accounts" with a fixed annual fee instead of commissions. And Fidelity's *Worth*, a glossy personal-finance magazine launched in February, must fight it out with Dow Jones & Co.'s new *Smart Money*.

Scion of an old Brahmin family, Johnson inherited Fidelity 20 years ago from his father, a mutual fund pioneer. Fidelity hasn't lost money since, despite some tough challenges. Johnson reacted quickly when Peter Lynch, the stellar manager of Fidelity's massive Magellan fund, retired abruptly in 1990. His handpicked replacement, Morris Smith, never missed a beat, returning 41% at Magellan last year.

One reason for Fidelity's success has been its advanced use of technology—always a Johnson passion. As a 12-

year-old, he rigged an electronic eye outside his bedroom, which was connected to devices that opened the door as he approached, while turning on the lights and radio automatically. More recently, Johnson's fiddling has helped produce one of the most efficient service-delivery systems in the business.

An admirer of Japanese long-term thinking, Johnson continually experiments with new businesses, too, while reinvesting profits in those with the most growth potential. Two examples: an institutional brokerage to compete with full-service Wall Street firms, and a retail discount brokerage house that trails only Charles Schwab & Co.

Johnson, whose 48% stake in Fidelity is worth about \$1.1 billion, plans to stay on indefinitely as CEO. His daughter Abby, who manages the Fidelity Select Telecommunications mutual fund, is his most likely successor—although she's only 30. Even when he retires, Johnson won't be far away. Like a true Boston Brahmin, he lives on Beacon Hill—just a stroll away from Fidelity's offices.

By Geoffry Smith in Boston

At Continental Bank, this isn't an insult. It's a promise.

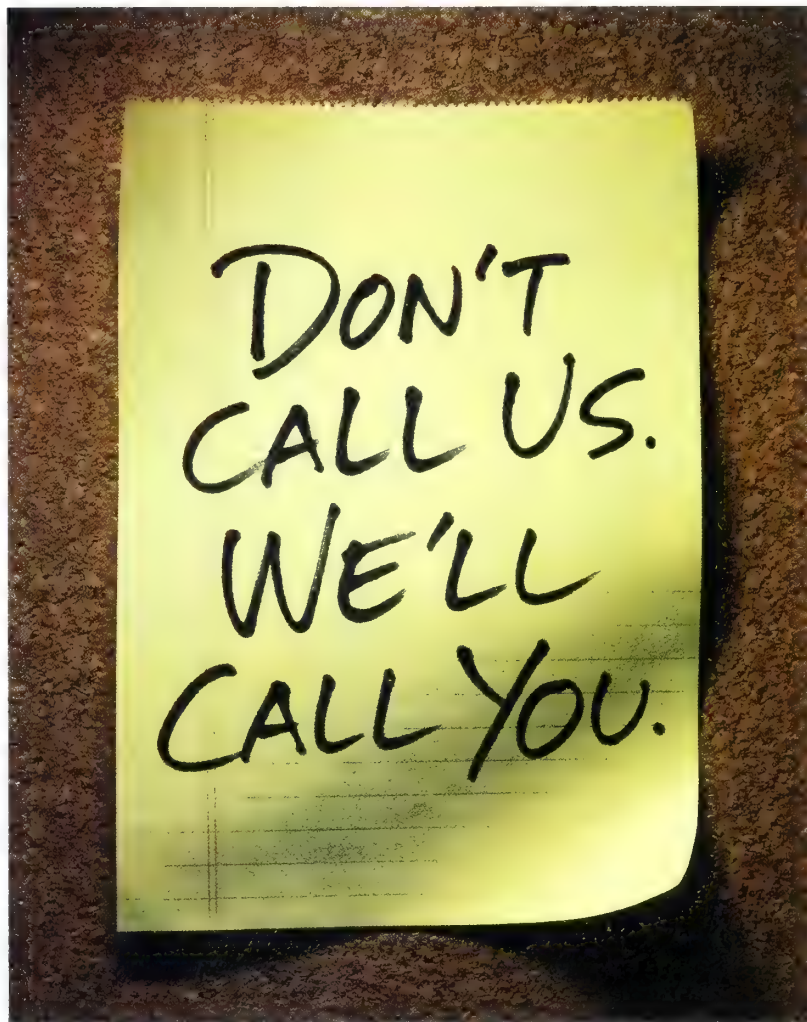
When you set yourself to the task of dragging business banking kicking and screaming into the 21st century, some interesting things happen. Not the least of which is that an old, hackneyed, Hollywood slam can suddenly become something akin to a corporate motto.

Such is the nature of change. (You remember change. It's that thing that has kept you perplexed, bewildered and astonished ever since you set foot in the business world.)

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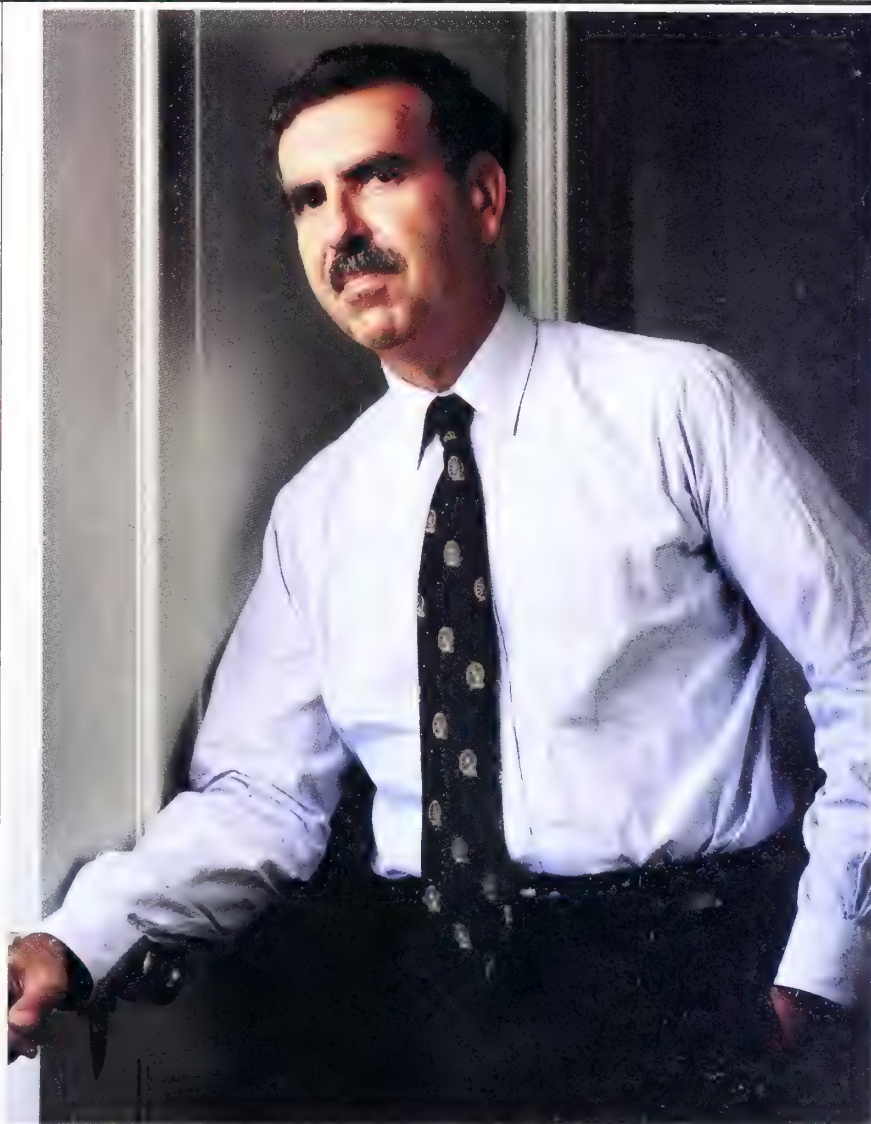
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GERALD LEVIN

He must meld clashing cultures and heal the rift at Time Warner that brought him to power. He will need to be a diplomat, and his relationship with Steve Ross should help



When Time Inc. merged with Warner Communications Inc. in 1990, several Time executives moved down the block to Warner headquarters in New York's Rockefeller Center. Then the company renamed its Time Inc. publishing division Time Warner Publishing. Many Time veterans were shocked. As far as they were concerned, these were signs that Time Inc. was fast becoming a footnote in Warner Chairman Steven J. Ross's entertainment portfolio.

Gerald M. Levin knows the power of symbols. So when he was suddenly named president and co-chief executive of Time Warner on Feb. 20, he took care to send out plenty of reassuring messages. Levin told *Time's* magazine publishers he would restore the Time Inc. moniker to their division. And he met with editorial staffers, trying to assuage their fears that the company was forgetting them in its stampede into electronic media. "His support and affinity for publishing is not in doubt," says Publishing Chairman Reginald K. Brack Jr.

Levin will need the diplomacy of Metternich to navigate the next few months. Chairman and co-CEO Ross is battling prostate cancer and has receded from day-to-day management. And Levin still must heal the rift that

precipitated his appointment: He and Ross forced out co-CEO and former Time President Nicholas J. Nicholas Jr. after Nicholas clashed with Ross and alienated Warner's powerful record and studio executives. Levin is far more popular than Nicholas, but his \$12 billion company is still torn between Time's buttoned-down culture and the freewheeling Warner.

Colleagues give Levin a decent chance of pulling it together. The 52-year-old doesn't have the presence of the towering Ross. But he's forceful and driven. After an early morning jog, he works a 13-hour day. He plunges into newfangled cable-TV technology with the same relish that he discusses Warner artists on the *Billboard* charts or the controversy over Oliver Stone's *JFK*, a Warner Bros. film.

Levin also has close ties to Ross, who despite his illness wields enor-

mous clout. "There is a simpatico relationship between Levin and Ross," says Michael J. Fuchs, chairman of Home Box Office, the Time Inc. unit Levin helped start in the 1970s. That will help him in Hollywood and on Wall Street. Levin supports Ross's strategic alliances—in which Time Warner sells stakes in its entertainment properties to foreign partners such as Japan's Toshiba Corp. Analysts expect Levin to strike another big deal this year, perhaps with France's Canal Plus, a pay-TV and film company.

Time Warner could use the cash. It lumburs under \$8.7 billion in debt and is talking to banks about refinancing. Still, most of its businesses are fundamentally strong. Levin's big task is to persuade the world's largest communications company to speak with one voice.

By Mark Landler in New York

FRANK SHRONTZ

The folksy, low-key Boeing CEO has seen his company jolted sharply by the crisis in the airline industry, but he remains optimistic. 'We've got a lot of challenges,' he says, 'but no life-threatening diseases'



Two years ago, Boeing Chairman Frank A. Shrontz's No.1 worry was complacency. The world's largest aircraft maker was flying high, with an astonishing \$90 billion backlog of commercial jet orders. It had a rapidly rising stock price, four years of strong job growth, and a freshly earned position as the nation's top exporter.

Today, complacency is the least of Shrontz's concerns: Boeing Co. has been jolted awake by the crisis in the world's airline industry. New orders fell 57% last year, and even such stalwarts as United Airlines Inc. have delayed orders. Shrontz has responded with sharp cuts in production of 737s, and he plans to cut 6,500 jobs by year-end.

Aircraft executives think in 20-year cycles, and Shrontz is no exception. In his plain, folksy style, he's cautiously optimistic about the long term. "We've got a lot of challenges," he says, "but no life-threatening diseases." He can take comfort in a commercial backlog

that has edged up to \$92.8 billion, but he also knows Boeing must focus intently on staying No.1.

That's why the normally low-profile executive stepped forward in January to attack European government subsidies of rival Airbus Industrie. "Twenty-one years of subsidy is far too much," he said. "Enough is enough." He also worries about Taiwan and other Asian governments spending billions to fund new McDonnell Douglas Corp. planes.

The threat is that either competitor will use its government support to develop a challenger to Boeing's unrivaled 747-400 jumbo jet. Both talk of producing a 650-seat behemoth, which would likely force Shrontz to join in when he's already swamped with a \$4 billion effort to develop Boeing's newest plane: a twin-engine widebody called the 777. The 777, somewhat smaller than the 747, is already playing catch-up with rival jets from Airbus and McDonnell.

Shrontz, 60, a modest Idaho native

with a taste for skiing and pheasant hunting, is hardly whom you'd expect to find guiding a \$29 billion company through such turbulent times. Trained as a lawyer and picked for the top spot partly because of a stint as an Assistant Defense Secretary under Gerald Ford, he seems slightly ill-suited to a Boeing faced with a shrinking defense business.

But Shrontz has shown steady leadership through several crises since becoming CEO in 1986. He endured a bitter strike in 1989 and soothed customers angry about the resulting delays and quality problems. He has also championed an effort to bust Boeing's bureaucracy and pushed an ambitious plan to design the new 777 entirely by computer.

And now he has got the full attention of his employees. With airlines going bankrupt and the competition circling, it's clear that complacency is a luxury Boeing can't afford.

By Dori Jones Yang in Seattle

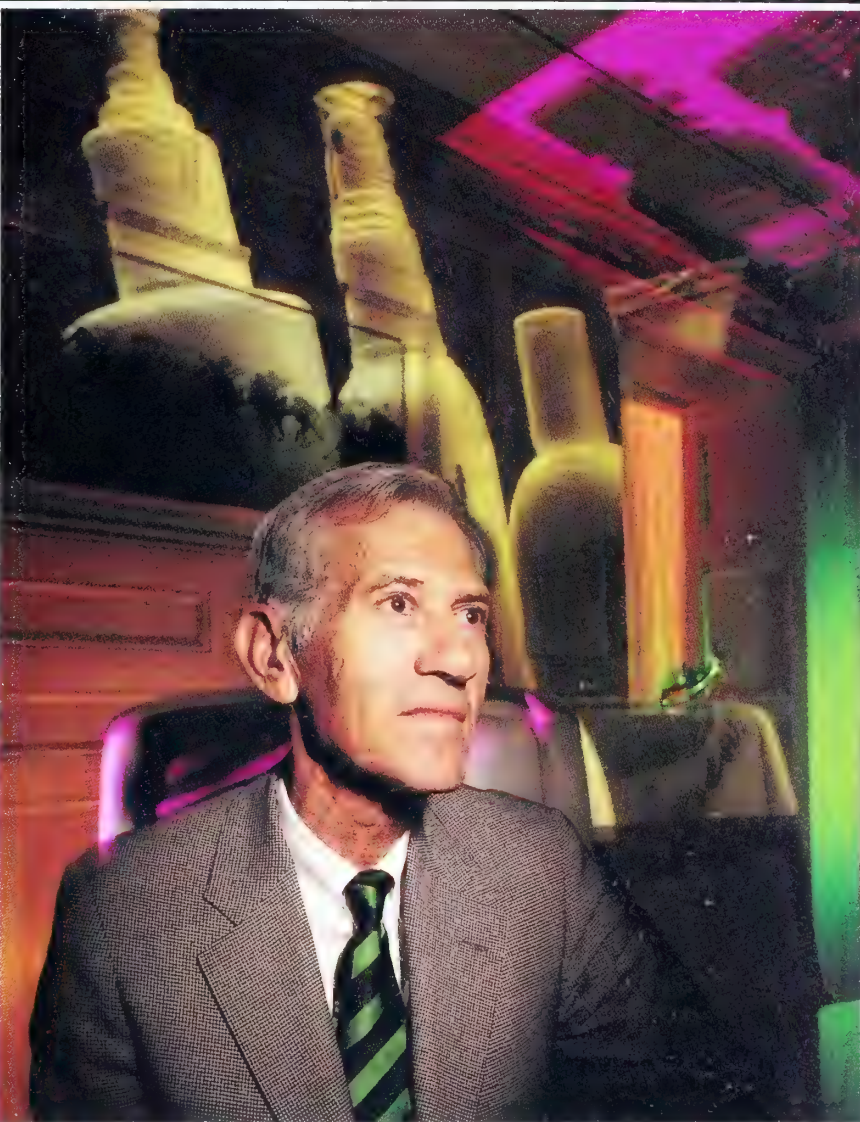
RICHARD GELB

Bristol-Myers' CEO is nothing if not a fighter. His latest bout: Trying to turn one of Bristol's new drugs into a blockbuster. The No. 1 candidate is Pravachol, a cholesterol reducer

Although his forte is marketing, Richard L. Gelb knows plenty about drugs. Six years ago, Bristol-Myers' CEO was diagnosed with stomach cancer, which is fatal in more than 50% of the cases. But thanks to major surgery and a year's chemotherapy featuring a Bristol product, Gelb's cancer is in remission. "If I was a good salesman," he says, "I would say I used three drugs, but it was ours that made the difference."

Gelb, 67, jokes about it now, but this glimpse of his own mortality was a watershed—both personally and for Bristol. It propelled him to call Richard M. Furlaud, CEO of rival Squibb Corp., and begin the talks that resulted in the 1989 formation of Bristol-Myers Squibb Co.—the world's No. 2 pharmaceutical company after front-runner Merck & Co. Gelb realized that while Bristol had some steady anticancer drugs and a host of strong over-the-counter products, it still lacked a blockbuster such as Squibb's Capoten, a \$1 billion antihypertensive. To make Bristol a long-term player, Gelb needed a merger.

Squibb etched Gelb's mark on the company, which had combined sales of \$11.1 billion last year. But the new Bristol now relies a little too heavily on Capoten. The drug's patent will expire



in 1995, and already annual sales growth has slowed to 8%—about half its previous rate—because of competition from similar drugs. Bristol introduced a once-a-day version of Capoten last year, but it wasn't an immediate hit. The bottom line is that Gelb must find a Capoten replacement.

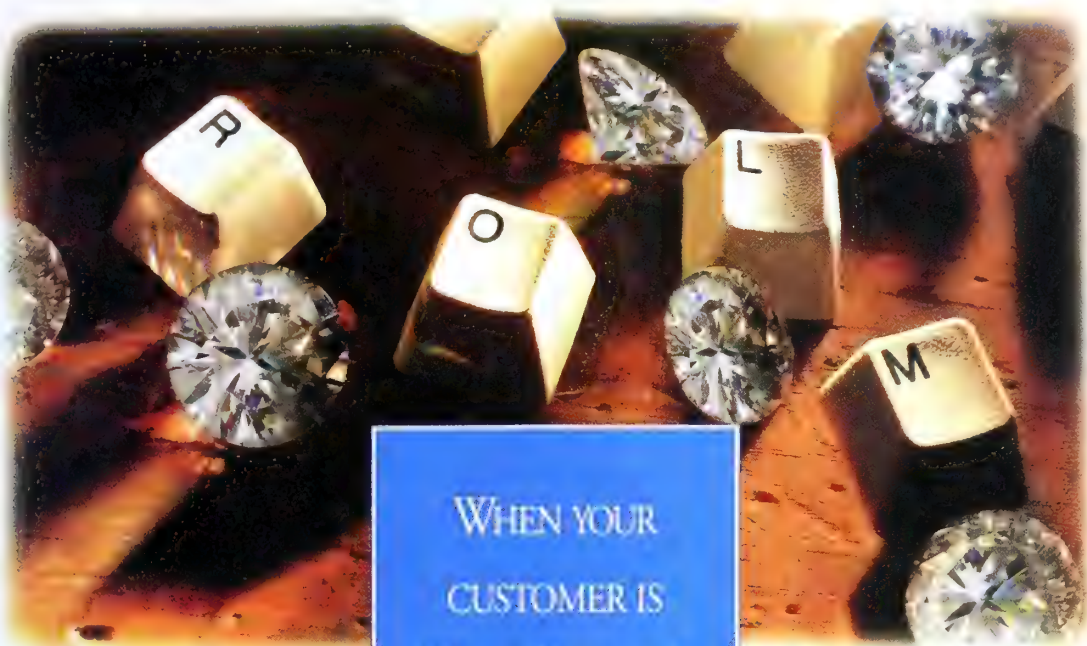
That's why all eyes are trained on Bristol's Pravachol, a cholesterol reducer that was approved by the Food & Drug Administration last October. The new drug has great promise because it helps mitigate the effects of heart disease—enough so that some patients can avoid surgery. Some say Pravachol has the potential to become another \$1 billion product. But the drug may have a difficult time making inroads against two similar Merck products, which have been on the market for three years.

Gelb takes the challenges in stride.

He notes that getting Pravachol approved at all was a big step—as was the approval of an anti-AIDS drug called DDI. As for the marketing hurdles, they're just part of the business. Gelb came to Bristol in 1959 when it acquired Clairol Inc., the hair-care company. Under his leadership, Bristol has successfully shepherded a stable of consumer products such as Bufferin, Excedrin, Windex, and Drano.

Besides, Gelb has demonstrated that he knows how to beat the odds. Once, when playing a round of golf with his buddy Arnold Palmer, Gelb watched intently as Palmer's second shot on a short par four rolled to a stop within a few feet of the pin. It was a sure birdie. Unfazed, Gelb stepped up and holed his second shot for an eagle. Lucky? You'll get no argument from Gelb. But he's not taking it back either.

By Bruce Hager in New York



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A lot of companies say that they are dedicated to customer service. But at WordPerfect Corporation, that commitment is backed up by some very potent numbers.

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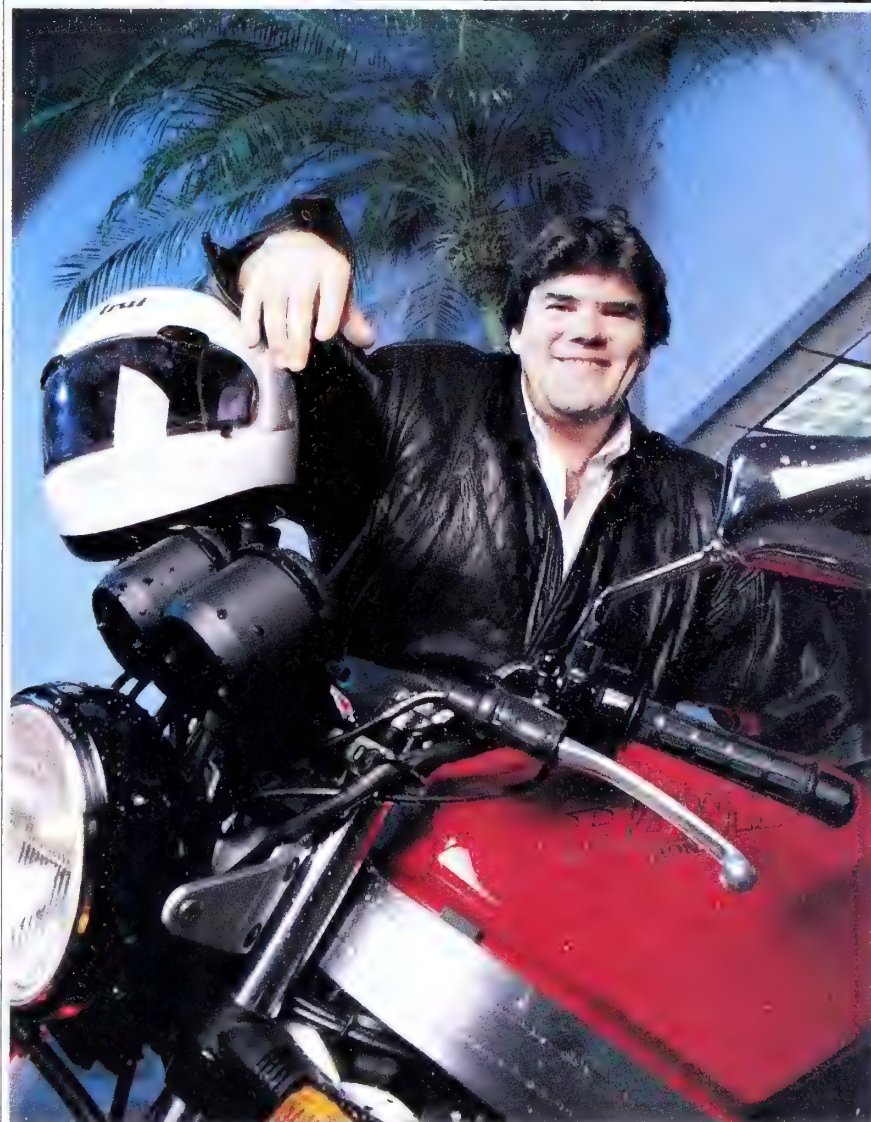
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PHILIPPE KAHN

'When we ship, we ship the best of breed,' Kahn says. But last year Borland promised more than it could deliver—and customers are still waiting



Most mornings, Philippe Kahn shuns the 20-minute car ride from his hillside home in Scotts Valley, Calif., to the offices of Borland International Inc. Instead, he prefers to leap on his Suzuki 350 dirt bike and navigate rocks, ruts, and tree-clogged hills to get to work in three minutes flat. Why? He likes to keep pushing the envelope at whatever he does—sailing, flying, dirt-biking, developing personal computer software. Especially developing personal computer software. "I like doing things right," says Borland's 40-year-old president. "If you want to do things right, you have to work at it."

Kahn's grab-life-by-the-adrenal-gland style has propelled Borland from an obscure developer of programming languages to one of the most respected makers of mainstream software. Thanks to its Quattro Pro and Paradox programs, Borland took nearly 20% of the market for both spreadsheets and data bases last year. Sales for the year ended Mar. 31, 1991, doubled to \$226.8 million, and profits ballooned 127%, to \$26.8 million. Along the way, Kahn gobbled up rival Ashton-Tate Corp. in a stock swap valued at \$439 million. Now, with sales topping \$500 million, Borland is the nation's No. 4 maker of PC software.

So far, more than good. But now the heat is on. Last October, Kahn

promised more than he could deliver. He told analysts that within months Borland would ship whiz-bang new Windows-type versions of Quattro Pro and Paradox and a revamp of Ashton-Tate's flagship dBase program. Wall Street went wild, heralding Borland as the one company capable of threatening No. 1 Microsoft Corp. In one week, Borland's stock soared from 48 to 70.

But the products are late, and customers are holding off purchases of Borland's existing software, slowing the company's revenue growth. The delays can only help powerhouse Microsoft, which in late March, fired a direct salvo at Kahn when it bought Fox Software Inc., the No. 2 player in Borland's biggest business—data bases.

But Kahn is unflappable. "We're quite comfortable," he says. "Our strategy is when we ship, we ship the best

of breed." He vows to ship soon, but he won't say when.

Kahn has done things his own way for most of his life. A French-born mathematician, he started the company in 1983 with little more than a credit card to pay for his computer. He still sleeps only four hours a night, spending the wee hours zapping off messages to workers from his home PC that poke into everything from marketing plans to specific software algorithms. "Philippe likes to be a one-man show," says former Borland executive Ronald S. Posner. "But at the end of the day, it comes down to who has the best products. And Philippe certainly has good products."

If he could only get them out the door as fast as he gets to work, Kahn could keep everybody happy—except Microsoft.

By Kathy Rebello in San Francisco

RICHARD ROSENBERG

BofA's CEO must cut up to 12,000 jobs and keep employee morale high and customers calm. All that while merging BofA's steely approach to loan standards with the more relaxed attitude of Security Pacific



Richard M. Rosenberg is about to become the central figure in a case study on modern banking. His story will be either an inspiration or a cautionary tale.

If there seems to be no middle ground, that's because of the scale of the task he is undertaking. The marketing whiz turned dealmaker is charged with making the biggest bank merger in U.S. history work. As chief executive of BankAmerica Corp., Rosenberg spearheaded the effort that culminated last August in the agreement to purchase Security Pacific Corp. for \$4.5 billion. With \$184 billion in assets, the combined banks would rank second only to Citicorp. That "will give us the strength to expand across the United States and the strength to be a major global player as well," Rosenberg says.

That kind of massive market power made some regulators wary. To please the Justice Dept. and state officials, in fact, BofA and SecPac has had to di-

vest of billions in assets. But winning over the regulators will seem to be child's play once Rosenberg begins to tackle the gargantuan task of assembling his empire of 91,500 employees in 11 states. The deal is premised on his ability to squeeze out more than \$1 billion in operating costs over three years. That means cutting up to 12,000 jobs, while selling 215 of 2,300 branches, and shutting down hundreds more. Combining computers and redundant operations should yield additional savings. Meanwhile, Rosenberg must keep employee morale up, reassure customers that they won't be abandoned, and merge the steely BofA approach to costs and loan standards with the more relaxed attitude of Security Pacific. SecPac lost \$400 million in last year's fourth quarter, and a lingering recession could do even more damage.

Rosenberg, 62, is prepared for the more competitive environment that is fostering consolidation throughout banking. A native New Englander, he

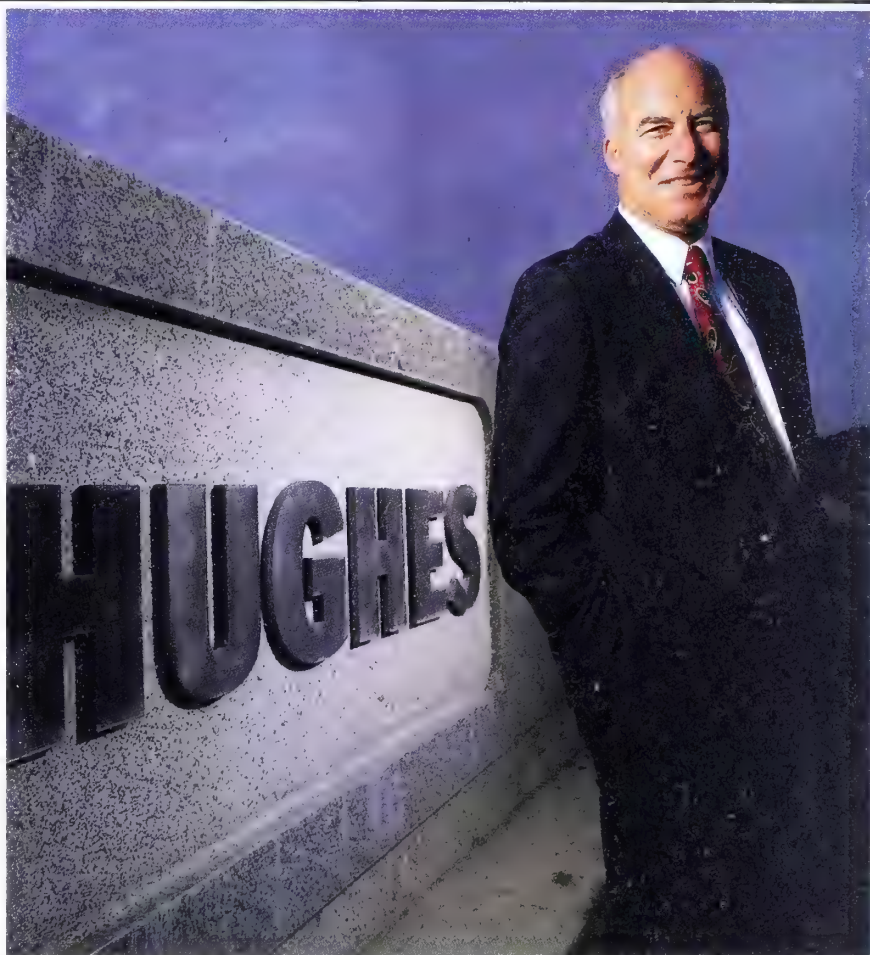
served as a Navy officer helping to rescue Vietnamese refugees. He learned his trade in the marketing department at Wells Fargo Bank, coming up with what passed in the 1970s for some daring innovations: pictures on checks and a combination checking-savings account. He got a taste of banking's frontier in 1986, when he helped to rejuvenate struggling Seattle First National Bank, a BofA acquisition. In 1987, while then-Chairman A.W. Clausen repaired the damage from years of heavy losses on real estate and foreign loans, he took over BofA's retail network. Rosenberg succeeded Clausen in 1990.

As Rosenberg sees it, if the consolidation brings inordinate pain, blame it on a misbegotten regulatory policy. "It's a result of years and years of Congress failing to allow the banking industry to compete," he says. Watch Rosenberg for a clue as to how painful a competitive environment will be.

By Russell Mitchell in San Francisco

MICHAEL ARMSTRONG

As Pentagon contracts dwindle, Hughes is counting on Armstrong to chart a course into the post-cold-war world. His reputation as a marketing whiz precedes him, but the ex-IBMer admits that in defense, 'I'm on a very steep learning curve'



Anne Armstrong is sick of moving. Over 31 years, she's packed up her family for a dozen transfers as her husband, C. Michael Armstrong, worked his way up the ranks at IBM. Now, the Armstrongs are moving again, but this time it isn't Big Blue's fault. At 53, Mike Armstrong is chucking his IBM career for a chance to run Hughes Aircraft Co., the \$7.7 billion defense electronics unit of General Motors Corp.

Long considered a top candidate to succeed IBM Chairman John F. Akers, Armstrong earned a reputation at the computer maker as a hard-driving marketing whiz. His challenge at Hughes is to steer the military contractor into the post-cold-war era. With Pentagon budgets shrinking, GM is counting on Armstrong's heralded marketing savvy and wide network of contacts to help launch Hughes into such new commercial lines of business as cellular telephones and direct-broadcast satellite TV. "We've got ourselves a world-class leader," exults Robert J. Schultz, the GM vice-chairman who oversees Hughes.

Still, Armstrong has his work cut out for him. He says that what attracted him to Hughes was its "rich talent and technology." But analysts contend that if the slow-moving weapons maker is to become an efficient mass-producer of consumer goods, Armstrong will have to lay off more employees, close some plants, and take other cost-cutting steps. Meanwhile, his mandate is to boost commercial work from about 30% of sales now to at least 50% by late in the decade.

Having never worked in the defense industry, he is also taking a crash course in how to play the Pentagon procurement game. "I'm on a very steep learning curve," Armstrong admits. A key part of his job will be lobbying to make sure Hughes gets its share of the Pentagon's dwindling orders for fighter-jet radar systems and missiles—two businesses threatened by budget cuts that account for a big chunk of Hughes's sales.

Capping off his career as chief of a Pentagon contractor was never part of Armstrong's game plan. A friend of Akers' since the two met in IBM sales

school in 1961, he put together an impressive string of successes at Big Blue, including a stint as head of domestic marketing and another as head of European operations. When Akers told him last fall that he wouldn't get the top job at IBM, Armstrong says he jumped at the chance to run Hughes.

At a time when many other IBMers his age are taking early retirement, it's no surprise that Armstrong opted to become top dog somewhere else: He has always been a scrapper. Born and raised in Detroit, he was a star football player in high school. Armstrong had hoped to play at Ohio's Miami University, too, until a shoulder separation cut his career short. A ferocious tennis player, his idea of a vacation is still to hit the courts for four or five hours a day. The move to Hughes Aircraft will no doubt leave him less time for that. But while Armstrong learns his new job, his family can finally unpack and relax. Now that Mike Armstrong is at the top, there's nowhere else to move.

By Eric Schine in Los Angeles

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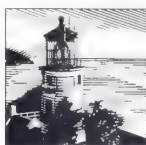
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ROBERT EATON

Talk about a man who likes a challenge: Eaton has to fill Lee Iacocca's shoes, prove Chrysler made the right choice by plucking him from GM, and see the third of Detroit's Big Three through one of its most crucial years ever



In Detroit's clannish auto culture, the news hit with a mighty thud. After months of speculation, Chrysler Corp. had finally bowed to shareholder pressure and picked a successor to Chairman Lee A. Iacocca, who plans to step down on Dec. 31. True to its renegade tradition, the No. 3 U.S. auto maker leapfrogged all the expected choices. In the end, it tapped Robert J. Eaton, president of General Motors Corp.'s European division.

It was a bold move. In nabbing the 52-year-old Eaton, Chrysler not only committed the Big Three sin of raiding a competitor, but it also gambled on an outsider during its toughest period since a late-1970s brush with bankruptcy. Chrysler's internal politics made the difference. While most Motor City oddsmakers were betting that Chrysler President Robert A. Lutz would land the job, the board feared that the tough ex-Marine pilot would be too divisive. Lutz had proven himself by shepherding through a badly needed

new line of cars. But the prospect of Lutz as captain had some key managers threatening to jump ship.

Iacocca, who sources say also clashed with Lutz, made no apologies for naming Eaton. "The board didn't find anything wrong with any of the other many candidates we looked at," he said. "We simply found something very right about Bob Eaton."

The 29-year GM veteran does have impressive credentials. A Colorado native, Eaton graduated from the University of Kansas with a bachelor's degree in mechanical engineering. He cut his teeth on the technical side of GM, where he built a reputation as an effective consensus-builder and a risk-taker. Before he went to Europe in 1988, he oversaw GM's first steps toward electric vehicles and managed development of the Saturn.

A dearth of operating experience didn't seem to hurt him in Europe. He helped turn GM Europe into the lowest-cost carmaker on the Continent,

squeezing out 25% more cars than previously with 10% fewer workers. Eaton also championed plans to expand European capacity 25%, to 2 million units by 1995. Even before the Berlin Wall came down, GM had plans to expand production into Eastern Europe.

So much for past glories. Eaton will have to prove himself all over again in his new job. As Chrysler prepares to roll out several crucial new models, its Byzantine finances will continue to confound. And Eaton will have to sift through the company's many opposing factions while struggling to establish himself as its leader. Lutz, who knows the operations best, has promised to stay on, despite being snubbed. But many a passed-over executive has said the same thing in between appointments with corporate recruiters.

Eaton says running Chrysler is "the best job in the whole auto industry." Maybe. But only if you like your challenges served up in jumbo portions.

By Ron Stodghill II in New York



ECKHARD PFEIFFER

These days, life is no Saturday morning volley for Pfeiffer: He must stop the slide that led Compaq's board to oust co-founder and CEO Rod Canion. That means repositioning a company whose net income fell 71% last year. Your serve, Mr. Pfeiffer

When Eckhard Pfeiffer moved from Munich to Houston to become Compaq Computer Corp.'s chief operating officer in January, 1991, the company was on a roll. "Nobody questioned Compaq's future," says Pfeiffer, "but the cliff was right in front of us." Was it ever. By yearend, Compaq had posted the first quarterly loss in its history and had laid off 1,700 employees. Most astonishingly, the board had ousted Compaq's co-founder and CEO, Joseph "Rod" Canion, and replaced him with Pfeiffer.

Nowadays, the questioning inside Compaq is endless. Started in 1982, the personal computer maker was the first company in U.S. history to reach \$1 billion in sales in just six years. But a sluggish PC market, ferocious competition, and Compaq's own ineptness pummeled the company last year. Net income plunged 71%, to \$131 million, while sales fell 9%, to \$3.3 billion. The stock has dropped more than 50%, to 22, in the last year.

The German-born Pfeiffer, 50, has faced more difficult times than these. In 1944, he fled with his family across

war-torn Europe in advance of Russian troops. They finally settled in Nuremberg, but his father, a German soldier, became a Russian prisoner of war and didn't rejoin the family for three years. The strife didn't stop Pfeiffer from launching his business career early. At 23, he helped shape Texas Instruments Inc.'s German operation, a division he ran by the age of 31. He eventually became a vice-president at TI's Dallas headquarters, but then jumped to Compaq in 1983 as head of its fledgling international arm. By the time he moved to Houston in 1991, Pfeiffer had built the unit into a \$1.8 billion powerhouse.

Repositioning Compaq will call upon all of Pfeiffer's expertise. In the past, the company's strategy was to sell high-performance machines at premium prices through a broad network of dealers. But then upstart PC clonemakers started beating Compaq with low-cost machines sold to customers through new channels, such as mail order, by phone, or in computer superstores.

Compaq must become a leaner man-

ufacturer while keeping its technical edge and high quality standards. To get there, the company has reorganized into two units: plain-vanilla PCs and more sophisticated computer systems. Now, desktops and portables can slug it out with low-cost clones, while the high research costs associated with more powerful computers are borne by a separate unit.

Also on the agenda: aggressive price cutting, a new ad campaign, and an expanded product line. Within months, Compaq will offer a new family of entry-level PCs designed to steal market share back from rivals such as Dell Computer Corp. and AST Research Inc. And Compaq PCs are now available both at superstores and through resellers.

Pfeiffer says the new philosophy is "no stroke of genius. It's one of just coming to our senses." He'd better hope that the realization isn't coming too late. He doesn't want 1992 to be an encore of his bruising first year in Houston.

By Stephanie Anderson Forest in Houston

SALLY FRAME KASAKS

They're not exactly Thelma and Louise, but Sally Kasaks and Ann Taylor could be a pair to be reckoned with—if Kasaks can stop the slide at the 204-store women's apparel chain. So far, so good: The stock has rebounded



Sitting in her sparsely furnished Manhattan office, the new chief executive of Ann Taylor Stores Corp. concedes that her company has had its share of troubles. "There have been five owners and five different CEOs here in the last 10 years," says Sally Frame Kasaks. "This business was foundering."

No kidding. Ann Taylor, the 204-store women's apparel chain that Kasaks took charge of on Jan. 31, has been in turmoil for months. Kasaks' predecessor, Joseph E. Brooks, bought the company in 1989 with Merrill Lynch Capital Partners. Merrill took a 56% stake, let Brooks put his son Thomas on the payroll, and then watched the two make merchandising errors that blew a hole in sales. Adding insult to injury, Thomas was stopped by U.S. Customs last October for failing to declare roughly \$140,000 worth of watches. He settled the matter with a \$44,000 fine, but both Brookses were gone within weeks. Ann Taylor's stock, which had been offered to the public in May at 26, tumbled to 12.

Kasaks, 47, seems just right to get Ann Taylor looking smart again. The daughter of a doctor and a former fashion model, she has the easy elegance of the chain's ideal customer. She is also an old Ann Taylor hand who's no stranger to turnarounds. She pulled a six-year hitch at the company in the early 1980s, the last two as CEO. In 1985, she became CEO of Talbots Inc., a women's specialty-store chain, and dramatically boosted sales. Then, she was recruited to head The Limited Inc.'s Abercrombie & Fitch menswear division. In three years there, she helped double sales to about \$70 million and pared losses substantially, according to Richard Baum, an analyst at Sanford C. Bernstein & Co.

When Ann Taylor came calling, Kasaks says the prospect of running the company again was appealing. But, she says: "It's very apparent that there was a certain lack of cohesiveness and focus" in the chain's approach. Merchandise wasn't moving, and customers were shopping elsewhere. "I was disappointed that I couldn't buy a pair of stirrup pants [at Ann Taylor] when

that was the biggest fashion of the season," she says.

Her plan: focus more on weekend wear, where sales have been weakest, and push blouses and accessories, which she calls "hamburger helpers" because they can extend the life of an outfit. She has shelved what she calls Brooks's "grandiose" overseas plans, and is concentrating on competing against The Limited, Banana Republic, and Talbots. Kasaks thinks Ann Taylor customers will return, once the stores regain a bit of their old luster.

A turnaround, however, is still a way off. Sales at stores open a year or more rose just 1% in January and fell 11.7% in February. On her first day, even Kasaks was wearing Abercrombie leggings and a blazer—rather than something from Ann Taylor. Still, Ann Taylor's stock has rebounded to about 20 since Kasaks' appointment, and she remains optimistic that she can get the chain back on track. "This is not the only business that's fallen on tough times," she says. "I mean sometimes we all just need a kick in the butt."

By Laura Zinn in New York

HARVEY GOLUB

There was 'an element of arrogance in the culture,' AmEx's new president says, that led executives to ignore the keen competition from credit cards and the complaints from merchants. Now he'll refocus on the basic card business



When Harvey Golub first saw Visa's TV ads for the Winter Olympics, he was furious. The new president of American Express Co. bristled at Visa's claim that the Olympics "don't take American Express." In fact, hotels and restaurants all over Albertville, France, took the green card. Visa's exclusive extended only to the ticket window. Golub immediately fired off a letter of protest to the International Olympic Committee and launched new ads countering Visa's claims.

Golub's reaction was swift and deliberate—qualities that have been lacking at AmEx in recent years. But the 42-year-old executive also knows Visa's ads are hitting home. The truth is, some retailers have abandoned American Express, complaining of arrogance and high fees. The average consumer, meantime, has a wallet full of plastic. After 23 years of regular quarterly earnings increases, the AmEx card division faltered last fall as revenues de-

clined. To make matters worse, the Optima card took an unexpected \$155 million write-off last fall after a spike in delinquencies.

AmEx Chairman James D. Robinson III elevated Golub after the native Brooklynite spent eight years in Minneapolis as head of AmEx's IDS Financial Services Div. Earnings quadrupled while he was there as he focused the firm sharply on personal financial planning. He cherry-picked stars from rival firms, upgraded training of his own planners, and acquired several small firms to boost production.

Golub hopes to bring the same sort of focus to the corporate level. And he admits that there's a management problem. "I think there was an element of arrogance in the culture," he says. That haughtiness often led AmEx executives to ignore the intense competition in the credit-card business. To raise cash and concentrate on plastic, AmEx has announced plans to sell part of its data processing unit and one of

its insurance units. Many on Wall Street also think AmEx will eventually unload the retail brokerage of Shearson Lehman Brothers Holdings Inc., as well as its Lehman Brothers investment bank.

The hard part will be figuring out how to retain an increasingly restless group of 36.6 million cardholders while placating merchants irritated by AmEx policies. To help energize management and smooth over merchants, Golub has enlisted Jonathan Linen, a well-respected AmEx veteran, as card division president. And in January, he relaunched the Optima card with a twist—cardholders get lower rates if they pay their bill on time for a year.

An avid baker of cheesecakes and pies, Golub also relaxes by building intricate model ships from scratch. "You do that so you don't think," he explains. Good thing. Golub will need to save all his brain power to rebuild American Express.

Leah Nathans Spiro in New York

DONALD FITES

His tough attitude toward the UAW, which has caused 11,000 workers to hit the picket lines, surprised many industry observers. But he knows that Caterpillar must cut labor costs if it is to compete overseas



Donald V. Fites could use a break. He has been chief executive of Caterpillar Inc. for only two years, but what a trying time it's been. Worldwide markets for Cat's construction and earth-digging equipment collapsed in 1991, resulting in a \$404 million loss on an 11% decline in sales, to \$10.2 billion. And since November, Fites has been warring with the United Auto Workers over pay and benefits, causing 11,000 of Cat's 16,500 workers to hit the picket lines.

Fites, 58, can expect little relief this year. Cat's markets are still in the dumper, ensuring yet another first-quarter loss. The strike, which has shut down Cat's most profitable factories, isn't helping. Negotiations are proceeding only in fits, and dealers are running short of equipment, possibly undermining the important spring buying season. Says industry consultant Frank E. Manfredi: "It's looking like a no-win situation."

But don't tell that to Fites. Sources

say the 35-year Cat veteran welcomes the chance to slice Cat's labor costs—strike or no strike. More than half of Cat's sales last year came from outside the U.S., and Fites knows a weak dollar helped exports. Any strengthening could eliminate Cat's edge over Japanese archrival Komatsu Ltd., which has lower costs. And since Cat already has aggressive programs in place to cut other expenses, labor is the last frontier. Fites declined to be interviewed for this article.

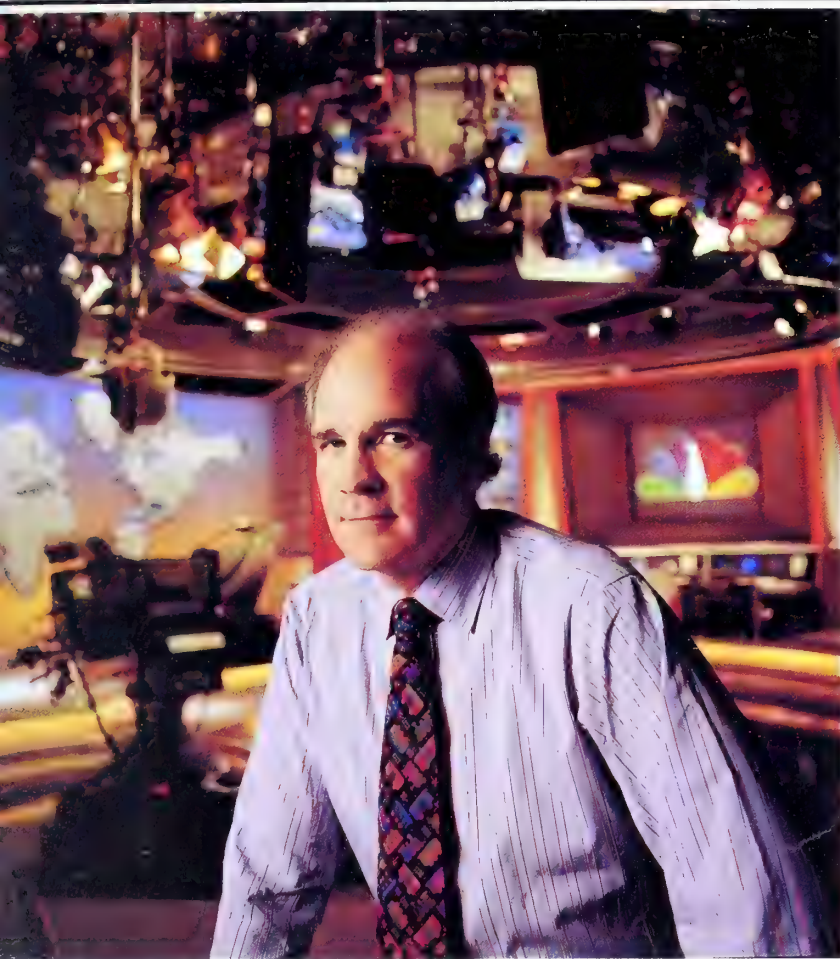
Fites's tough stance against the union surprised many industry observers. After all, he came up through Cat's marketing division, where his forte was buttering up customers, not bashing unions. James Vito, vice-president for sales at Philadelphia dealer Giles & Ransome Inc., remembers a recent visit when Fites spotted some Cat earth-digging equipment at work and jumped out of the car to interview the operator. "He's always asking customers what they think of the prod-

uct," says Vito. "How many chief executives do that?"

Insiders, however, know Fites is hardly a soft touch. Although Cat's big restructuring in 1990 was directed by former CEO George A. Schaefer, Fites was the plan's architect. Its goal: to foist much of the accountability for profits upon plant managers. Fites, who has few avocations besides aerobics and an occasional golf game, is a hard charger. Having worked in Europe, Japan, and Brazil, he understands better than most what it takes to compete overseas. High labor costs don't cut it.

But he has a formidable opponent in the UAW. Even if labor and management forge an agreement, UAW Secretary-Treasurer Bill J. Casstevens says that Fites can expect an angry work force for some time. In the interest of his beloved customer, Fites has made a big gamble. This year may tell whether the bet pays off.

By Kevin Kelly in Chicago



ROBERT WRIGHT

NBC is losing money, and its ratings are slipping. Wright has two ideas for stemming the red ink: Share the costs of new programming with studios and put some of the Summer Olympics on pay-per-view television

When NBC's *Today* went on the road to Cuba in February, Bryant Gumbel and Katie Couric had an unlikely traveling companion: Robert C. Wright, the network's president. Wright tagged along to view the daily production and even arranged a one-on-one meeting with Fidel Castro. "He's developed a passion about news since the gulf war and the Thomas Hearings," says Michael G. Gartner, president of NBC News.

Has Wright, the epitome of a cost-conscious executive, finally caught the network TV bug? Don't bet on it. After all, Wright also declared recently that he'd rather see NBC lose the ratings race than bleed millions of dollars—as No. 1 CBS did last season. The electrifying news events of 1991 may have intrigued his interest, but it is more than coincidence that news programs are much cheaper to produce than situation comedies such as *The Cosby Show*. That's why Wright gave the green light to *Dateline: NBC*, a prime-time news show with Jane Pauley that debuted in March.

It's more accurate to say that Bob

Wright is making the best of a bad deal. NBC lost \$60 million in 1991, as the recession battered ad revenue and perennial hits such as *Cosby* and *Cheers* became sclerotic. And though investment bankers say Wright spent much of last year trying to sell off all or parts of the network, a bad regulatory environment frustrated him. They say the goal was to extricate General Electric Co. from its troubled investment in television, but for now, there's no easy way out.

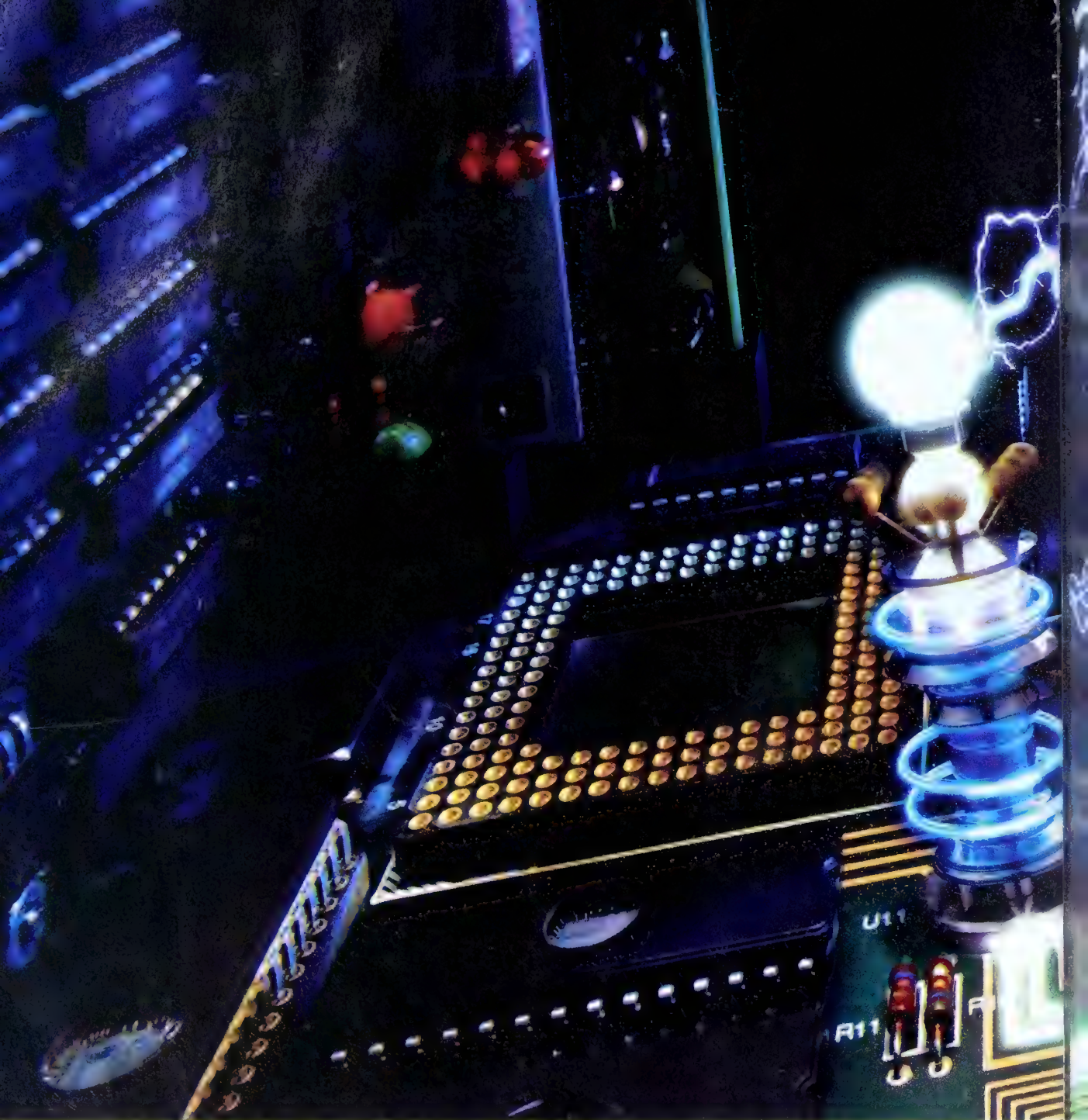
Selling the network became complicated last year when the Federal Communications Commission refused to rescind rules that allow Hollywood studios—instead of the networks—to reap profits from reruns. That cooled interest in NBC from potential suitors such as Paramount Communications Inc. For now, says Wright, he would be happy teaming up with studios to develop programming.

By sharing the costs of new programs, Wright hopes to stem the tide of red ink at NBC. He figures network TV as a whole may not be profitable again until 1994, after NBC and its ri-

vals have renegotiated sky-high contracts for the rights to telecast baseball and football. Meantime, he has a scheme to ease the burden of NBC's telecast of the Barcelona Olympics this summer. The network will broadcast part of the games on pay-per-view cable without commercials, and by getting viewers to pay extra, Wright hopes to earn back half of the \$401 million NBC paid for the games. The other half would come from ad revenue. Will it work? Cable execs predict NBC won't sign up close to the number of viewers it needs to break even.

That would be an embarrassing setback for Wright. An affable suburbanite who collects vintage cars, he's tough as nails at the office. But the pressure is on. While GE watchers still regard the 48-year-old Wright as a candidate to succeed CEO John F. Welch Jr., it doesn't help that other GE division heads are making money, while Wright loses a bundle. As NBC battles the worst downturn in network TV history, even Wright's grit may not win him a corner office in Fairfield.

By Mark Landler in New York

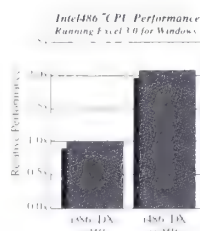


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The Computer Inside.™

LAURENCE HIRSCH

As head of Centex, the big homebuilder, Hirsch has felt recession's sting. But Centex has also made the most of the slump, knocking out rivals and muscling into new markets

*Y*ou'd think Laurence E. Hirsch, chief executive of Centex Corp., would be kicking up his heels. After all, Centex, the nation's largest homebuilder, shook off the recession in January as its sales started going through the roof. And experts predict that after skidding to a 45-year low in 1991, housing starts will jump 18% this year, maybe more.

But Hirsch, 46, isn't a kick-up-your-heels kind of guy. "We're not terribly enthusiastic if this thing turns into a boom," he says warily. It's not that he likes recessions. Dallas-based Centex has suffered like everyone else: Net earnings for its fiscal year ended Mar. 31 fell an estimated 22%, to \$34 million, on revenues of about \$2.3 billion. But given the company's clout, Hirsch also sees opportunity in bad times. While a credit crunch and poor sales knocked out rival builders, well-heeled Centex has muscled into several new markets. With a solid balance sheet, "we tried to take advantage of this downturn," Hirsch says.

Even without a surge in housing starts, Hirsch sees plenty of room for more growth. Centex' share of national home sales has been rising steadily since 1987, but it still has less than 1% of the fragmented homebuilding industry. It's in 39 U. S. markets, includ-

ing all but two of the 20 that analysts project to grow fastest through 1995. That's up from a total of just eight markets in 1980, when two-thirds of Centex' homebuilding earnings came from Texas.

Hirsch, a New York native, has always been aggressive. As a lawyer in Houston, he became involved in a proxy fight in the late '70s for control of a cement and oil company called Southdown Inc. When his side won the battle and ousted the president, Hirsch volunteered for the job. He sold off such extraneous units as a candy company and a winery, while expanding the cement and oil businesses into a \$316 million company. In 1985, Centex stole him away.

An avid reader and concertgoer, Hirsch aims to outmaneuver local and regional rivals by bringing more sophistication to homebuilding than they

can. To stand out from his mostly mom-and-pop competitors, he keeps three architects on staff who create up to 250 new home designs annually. Centex spends heavily on its own market research, and it trains its own sales people.

Not all of Centex' businesses are doing so well. Operating earnings at its construction products group, which sells wallboard and other building materials, fell by about half in the first nine months of the past year. The contracting business is tough, too, because commercial building is in the dumps and more competitors are vying for public projects such as prisons and hospitals. Hirsch's solution to the problem? He's on the prowl for commercial building contractors to acquire. As usual, he aims to make the best of bad times.

By Wendy Zellner in Dallas





DWAYNE ANDREAS

Even with his decades of experience in selling grain to the Soviets, the chairman of Archer Daniels Midland finds that doing business in the republics is 'two steps forward and occasionally a step back.' Still, 'the opportunity is huge'

Insights are often where you find them, and confirmed Russophile Dwayne O. Andreas has found plenty of what used to be the Soviet Union.

Take, for instance, the dinner party held last year by Mikhail and Raisa Gorbachev in their dacha a month before the Soviet President resigned. Besides Andreas and his wife, the guests included Eduard A. Shevardnadze, U.S. Ambassador Robert S. Strauss, and their wives. Andreas says Gorbachev "was quite proud of what he had achieved." But what he remembers most is a forgettable enough joke by Strauss: "Predictions are hard to make, especially if they're about the future."

It's not hard to see why the line resonates for Andreas. As chairman of commodities giant Archer Daniels Midland Co., he has spent decades building relationships with the Soviets in order to sell them grain. Contacts within the Soviet elite have made him one of the world's top exporters to the region. But now, the turmoil and jammed bureaucracy make predicting the future there next to impossible.

In one way, Russia and the other republics haven't changed. "The opportunity is huge," Andreas says. Besides lots of grain, the food-distribution system needs 100 new processing plants and 50 million tons of storage space, he estimates. ADM's plans are modest for a company with \$8.8 billion in annual sales: Andreas wants to build two soybean processing plants and some grain elevators for a total investment of \$50 million. But even getting that much done will be tough. "It's two steps forward and occasionally a step back," Andreas says. "But if you don't change your direction, eventually you'll get where you're headed."

Meanwhile, Andreas is trying to make strides with a pet project back home: ethanol. ADM pioneered development of the corn-based auto fuel, which reduces pollutants when mixed with gasoline. Making the product has been a boon, thanks largely to a government subsidy of 5.4¢ a gallon. And although usage is currently concentrated in the Midwest, Clean Air Act amendments taking effect this year should make it more popular else-

where. Andreas hopes the 10% of revenues ADM gets from ethanol will grow to at least 25% over the next few years. But A.E. Staley Manufacturing Co., Cargill Inc., and several major farm cooperatives are moving into the business.

The competition won't catch Andreas standing still. At the age of 73, he's still driving hard. He jets regularly between ADM headquarters in Decatur, Ill., and his homes in New York and Bal Harbour, Fla. Most days in Florida include a round of golf with such illustrious buddies as Ross Johnson, former CEO of RJR Nabisco, Tip O'Neill, the former Speaker of the House, or Robert Mosbacher, former Commerce Secretary.

Andreas is also a regular contributor to Miami's Barry University, where the business school is named after him. But wherever he is, Andreas pores over political, economic, and weather reports from ADM's staff in 28 countries. That's one way to avoid those nasty surprises the future can spring on you.

By David Greising in Chicago

GARY WILSON

AL CHECCHI

The team has done a remarkable job of keeping Northwest aloft. The twofold problem now: How can they keep it from being an also-ran to United, American, and Delta? And how can they exit the deal with as much money as possible?



It has been a tough three years for financiers Alfred A. Checchi and Gary Wilson. Since they vaulted into the national spotlight in 1989 with the \$3.65 billion leveraged buyout of Northwest Airlines Inc., everything that could go wrong has. Despite their insistence to the contrary, Checchi and Wilson are in a very sticky position.

Consider the chronology. Less than a year after the buyout, slowing airline traffic begins to signal a deepening recession. Then the gulf war hits, sending the airline industry into a crisis of historic proportions. While industry laggards such as Eastern Air Lines Inc. and Pan Am World Airways Inc. start throwing off assets in futile efforts to survive, Checchi and Wilson find themselves hamstrung by heavy losses and \$4.2 billion in long-term debt. A golden opportunity to turn Northwest into a global megacARRIER

through acquisitions slips through their fingers.

That's not to say Checchi and Wilson—and their newly assembled airline management team—haven't done a remarkable job. Despite \$618 million in losses in the past two years, they've been able to restructure much of the LBO debt with cheaper paper. They've also improved the airline's service markedly. Their biggest coup was persuading the state of Minnesota to dump \$835 million into Northwest's coffers. Most is slated for a new maintenance base, but \$320 million can be used as Northwest chooses.

Nice work. But for Checchi and Wilson, a twofold problem remains: How can they keep Northwest from becoming an also-ran to industry stalwarts United, American, and Delta? And how can they exit their deal with as much money as possible? They know that

the answer to the first question will have a direct impact on the second.

To give the airline critical mass, Checchi and Wilson have scoured the world for assets to buy on the cheap. In the past year alone, they have studied pacts with Continental, Midway, Qantas, Philippine Air, and America West. A big hope was dashed when KLM Royal Dutch Airlines backed out of a proposed merger with giant British Airways PLC. KLM owns a big stake in Northwest, and a deal might have meant fresh capital. Ultimately, it could also have forged a formidable international competitor out of the three carriers.

They'll have to buy something soon if they plan to keep up with American, United, and Delta. Northwest would like to build up its domestic system, which is especially weak in the Southwest and Eastern Seaboard, to feed

flights to Asia. That's why Checchi and Wilson have been nosing around Continental Airlines Inc. for so long. Sources close to Northwest say they won't deal until Continental's troubles with the federal Pension Benefit Guaranty Corp. are cleared up later this year.

The dealmakers are undeterred. "If something is worth doing, it is financeable," says Checchi. But finances remain tricky. If Northwest continues to sputter, Checchi and Wilson may feel pressure to take the company public again. Analysts believe they could raise \$1 billion from a stock offering. Problem is, they don't want to sell just yet. Debt is cheap, and despite the strong market for public offerings, an airline stock might stall, given the industry's woes. They'd rather cash out in a rebound.

Northwest may be the biggest challenge Checchi, 43, and Wilson, 53, have faced during a long friendship. They met when Checchi was in high school and Wilson, a Wharton MBA, was working for Checchi's uncle. After Checchi graduated from Harvard Business School in 1974, Wilson gave him a job at Marriott Corp., where Wilson eventually became CFO. The two became known for structuring hotel deals, but Checchi made his fortune in the early 1980s as a dealmaker for Fort Worth millionaire Sid R. Bass. When working for Bass at Walt Disney Co. in 1985, he recruited Wilson to help with the ailing company's turnaround.

Despite their long years together, Checchi and Wilson couldn't be more different. Checchi is the glad-handing front man with labor, bankers, and the media. An active Democrat, he last year helped Democratic National Committee Chairman Ron Brown craft a strategy to woo big donors. Wilson, by contrast, is Mr. Inside—he negotiates most of the deals he and Checchi do. A staunch Republican, he is an intensely private man and rarely surfaces for interviews. He was slowed in January by quadruple-bypass heart surgery, but insists he'll be back to a full-time schedule soon.

There's more than enough to do. "I can't tell you how much fun it is," insists Checchi. "Fun" is one way to look at it. But with the Big Three airlines speeding ahead, the duo's dreams of creating a megacarryer—and a megafortune—could slip away if they don't move soon.

By Kevin Kelly in Chicago

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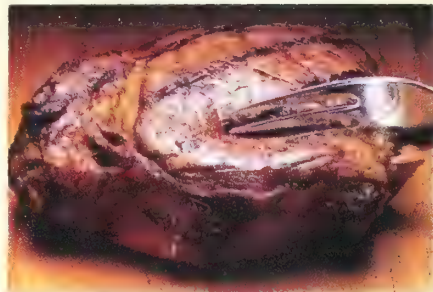
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THE BUSINESS WEEK 1000

THE TOP 1000
COMPANIES RANKED
BY STOCK-MARKET
VALUE

THE TOP 1000
RANKED BY
INDUSTRY

ALPHABETICAL LIST
OF COMPANIES

HOW TO PUT THE NUMBERS TO WORK FOR YOU

Say it aloud: Three trillion, three hundred and seventy-five billion dollars. That is what America's 1,000 most valuable companies are worth in today's market.

It's an awesome number, grown appreciably bigger this year. In part, that reflects some optimism on the economy's prospects. But don't bet the mortgage on it. While the BUSINESS WEEK 1000's collective market value climbed a formidable 13% over the past 12 months, there were 10% more shares outstanding—a significant part of the gain. All told, profits at these companies were off 18% on a meager 2% gain in sales. Return on common equity, return on invested capital, and margins all slipped for the year. It is not a pretty sight.

These big-picture figures don't begin to tell the whole story of the BUSINESS WEEK 1000, though. The truly important numbers are the ones that can inform you about what's happening at specific companies. And you will find plenty of them here.

In the pages that follow, you can track the performance—and preview the future—of 1,000 individual companies. This is no broad-brush overview. The BUSINESS WEEK 1000 offers 25 different measurements. Many of them, including market value, sales, profits, margins, and assets, include valuable comparisons with the year before.

Don't limit yourself to just the left-hand side of the tables. Over on the right, the share-data section is every bit as informative. The dividend section, for instance, lists 1991 yield, payout, and total return for each company. Earnings-per-share data provide 1990 and 1991 numbers—plus analysts' estimates for 1992.

To help place all these numbers in context, turn to page 164, where you will find much of the same data broken down by industry. If you are looking for specifics on a particular company, try the alphabetical index beginning on page 211.

COMPOSITES

MARKET VALUE (BILLIONS)	\$3,375
CHANGE FROM A YEAR AGO	+13%
RETURN ON COMMON EQUITY	9.2%
YEAR AGO	12.5%
RETURN ON INVESTED CAPITAL	8.8%
YEAR AGO	11.0%
SALES (BILLIONS)	\$3,860
CHANGE FROM 1990	+2%
PROFITS (BILLIONS)	\$143
CHANGE FROM 1990	-18%
ASSETS (BILLIONS)	\$7,823
CHANGE FROM 1990	+4%
1991 MARGINS	3.7%
1990 MARGINS	4.6%

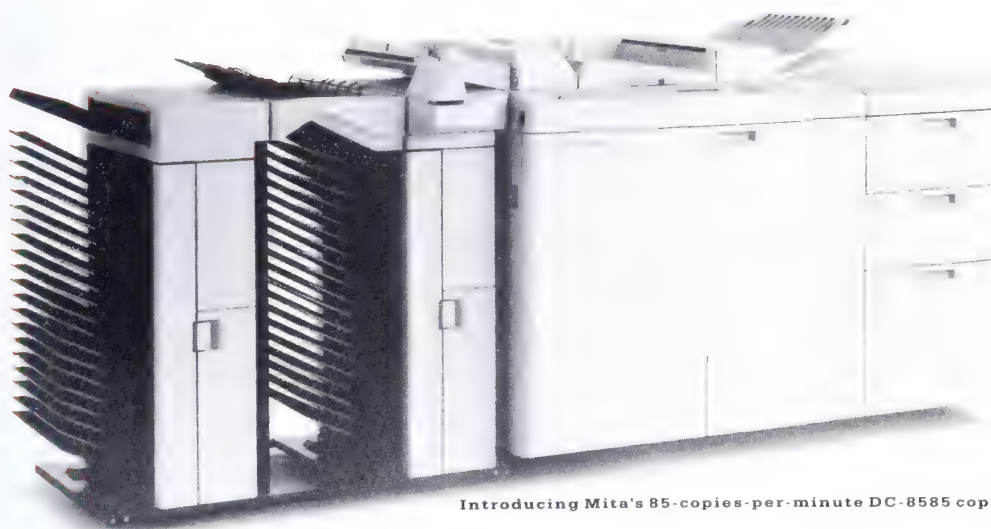
AVERAGES

SHARES OUTSTANDING	84 MIL.
YEAR AGO	76 MIL.
TURNOVER	88.4%
YEAR AGO	79.8%
YIELD	2.39%
YEAR AGO	2.81%
PRICE	\$47
YEAR AGO	\$44
PRICE-TO-BOOK	230%
YEAR AGO	187%
HIGH/LOW PRICE	\$53/\$35
RETURN TO INVESTORS	36%
1991 EARNINGS PER SHARE	\$2.03
1990 EARNINGS PER SHARE	\$2.16
1992 EARNINGS ESTIMATE	\$2.78
VARIATION	15.1%
HELD BY INSTITUTIONS	51%
YEAR AGO	50%
PAYOUT	54%
YEAR AGO	45%
PRICE-EARNINGS RATIO	22
YEAR AGO	18

DATA: STANDARD & POOR'S COMPUSTAT SERVICES; INSTITUTIONAL BROKERS' ESTIMATE SYSTEM; VICKERS/STOCK RESEARCH

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THE TOP 1000 U.S. COMPANIES RANKED BY STOCK- MARKET VALUE



	COMPANY	MARKET VALUE		SALES	PROFITS			MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990	12 MONTHS 1991	12 MONTHS 1990	ON INVESTED CAPITAL	ON COMMON EQUITY	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990
1	EXXON	69086	2	104217y	-2	5600.0	12	5.4	4.7	NA	16.7	84593	-2
2	PHILIP MORRIS	68770	3	48064	8	3927.0	11	8.2	8.0	17.2	31.4	47384	2
3	GENERAL ELECTRIC	66969	4	59379	3	4435.0	3	7.5	7.5	21.2	20.5	168259	9
4	WAL-MART STORES	60954	6	43887	35	1608.5	25	3.7	4.0	18.6	25.1	15443	36
5	MERCK	57976	5	8603	12	2121.7	19	24.7	23.2	37.7	45.6	9499	18
6	COCA-COLA	52411	9	11572	13	1618.0	17	14.0	13.5	33.3	38.3	10222	10
7	AMERICAN TELEPHONE & TELEGRAPH	49426	8	44651	2	522.0	-83	1.2	7.1	3.7	3.2	53355	10
8	INTERNATIONAL BUSINESS MACHINES	49322	1	64792	-6	-564.0	NM	NM	8.7	-14.3	1.5	92473	6
9	BRISTOL-MYERS SQUIBB	41431	7	11159	8	2056.0	18	18.4	17.0	34.7	35.5	9416	2
10	PROCTER & GAMBLE	33558	10	28229	9	1787.0	3	6.3	6.7	15.7	25.4	23733	15
11	JOHNSON & JOHNSON	32019	11	12447	11	1461.0	28	11.7	10.2	23.2	27.3	10513	11
12	DU PONT	29535	16	38695z	-3	1403.0	-39	3.6	5.8	7.8	8.2	36117	5
13	GTE	26778	20	19621	2	1529.0	-6	7.8	8.5	NA	14.0	42437	6
14	ABBOTT LABORATORIES	25410	23	6877	12	1088.7	13	15.8	15.7	34.1	34.0	6255	12
15	PEPSICO	25054	15	19608	10	1080.2	-1	5.5	6.1	12.0	20.8	18783	10
16	PFIZER	23941	28	6950	9	722.1	-10	10.4	12.5	15.7	14.2	9635	6
17	AMERICAN HOME PRODUCTS	23828	27	7079	5	1375.3	12	19.4	18.2	NA	44.4	5775	-4



GLOSSARY

MARKET VALUE: Share price on Mar. 6, 1992, multiplied by latest available common shares outstanding

PROFITS: Net income from continuing operations before extraordinary items

MARGINS: Profits as a percent of sales

RETURN ON INVESTED

CAPITAL: Profits plus minority interest and interest expense (adjusted by tax rate) as a percent of debt and equity funds

RETURN ON COMMON

EQUITY: Net income available for common shareholders divided by common equity

ASSETS: Total assets as reported at end of company's latest available 1991 quarter

RECENT SHARE PRICE:

Price for a single share of a company's most widely traded issue of common stock as of the close of trading Mar. 6, 1992

HIGH/LOW PRICE: Trading range for company's common stock, Mar. 1991 to Mar. 1992

BOOK VALUE PER SHARE:

Sum of common stock, capital surplus, and retained earnings divided by most recently available number of common shares outstanding

P-E RATIO: Price-earnings ratio based on 1991 earnings and Mar. 6 stock price

YIELD: Annual dividend rate as a percent of Mar. 6 stock price

PAYOUT: Latest annualized dividend rate as a percent of the company's most recent annual earnings per share

TOTAL RETURN: Annual dividend per share plus current market price, as a percent of year-ago price per share

INSTITUTIONAL HOLDINGS:

Percent of outstanding shares of stock held by banks, colleges, pension funds, insurance companies, and investment companies as calculated by Vickers Stock Research Corp.

SHARES OUTSTANDING:

Millions of common shares outstanding as of the company's latest available financial report

TURNOVER: Percent of outstanding common shares changing hands in the latest year

FY: Number of the month in which company's fiscal year ends

EARNINGS PER SHARE:

Primary earnings per share, excluding extraordinary profit or loss, divided by number of common and common equivalent shares

EARNINGS PER SHARE

ESTIMATES: Analysts' consensus estimates for 1992 compiled as of Mar. 6 by Institutional Brokers Estimate System (IBES), a service of Lynch, Jones & Ryan.

VARIATION: Percentage by which two-thirds of the 1992 earnings estimates are above or below the average estimate as calculated by IBES.

DATA: Unless otherwise indicated all data in the following Top 1000 tables have been provided by Standard & Poor's Compustat Services Inc., a unit of McGraw-Hill Inc.

RATINGS	DIVIDENDS					SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
	12 MONTH HIGH/LOW \$	PR CE AS % OF BOOK VA, JE	P E RATIO	YIE, D	PAYOUT %	TOTAL RETURN	INSTITUTIONS HOLDING	SHRS OUT MIL	TURN OVER	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 \$	VAR IATION
62/55	209	13	4.82	60	8	39	1242	22.0	12	3.96	4.45	4.20	10.0	Fuel B
83/62	550	18	2.81	50	19	60	920	50.9	12	3.83	4.24	5.56	1.6	Consumer E
81/62	309	15	2.84	43	18	52	864	39.3	12	4.85	5.10	5.61	1.6	Conglomerates
60/35	950	38	0.32	12	53	29	1153	29.0	01	1.14	1.40	1.72	1.7	Retailing
170/100	1247	27	1.68	46	57	57	387	43.4	12	4.56	5.49	6.48	1.2	Health care B
83/51	1241	32	1.22	40	58	54	664	31.5	12	2.04	2.43	2.87	1.7	Consumer C
41/33	305	94	3.50	330	15	30	1309	36.7	12	2.51	0.40	2.94	3.1	Telecomms. A
135/84	133	NM	5.60	DEF	-29	48	571	73.5	12	10.51	-0.99	7.18	12.5	Office equipment B
90/74	715	20	3.46	70	11	58	520	51.7	12	3.33	3.95	4.66	1.1	Health care B
107/76	505	20	2.02	41	28	45	339	41.1	06	4.49	4.92	5.20	2.1	Consumer D
117/81	598	22	1.66	36	25	58	333	54.8	12	3.43	4.39	5.12	1.4	Health care D
51/36	174	21	3.82	81	27	40	671	31.8	12	3.40	2.08	3.28	8.2	Chemicals
35/28	251	18	5.64	101	3	51	889	33.9	12	2.26	1.69	2.14	2.8	Telecomms. B
70/45	793	23	1.67	39	39	49	425	35.4	12	2.22	2.55	2.96	1.0	Health care D
37/27	482	24	1.51	36	0	53	789	61.2	12	1.37	1.35	1.78	2.2	Consumer C
87/50	472	34	2.04	69	45	67	330	64.2	12	2.39	2.13	3.21	1.9	Health care B
86/55	769	17	3.44	60	43	62	316	41.2	12	3.92	4.36	4.84	1.4	Health care B



RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %
18	MOBIL	23699	14	56432y	-4	1921.0	0	3.4	3.3	10.2	11.4	41354	
19	GENERAL MOTORS	22792	18	123056y	-1	-4992.0	NM	NM	NM	NM	-18.2	184326	
	ELECTRONIC DATA SYSTEMS	5919	NR	7029	17	563.0	13	8.0	8.3	20.1	21.6	5703	23
	GM HUGHES ELECTRONICS	1321	NR	11481	-1	505.0	-30	4.4	6.2	6.5	6.1	12931	
20	BELLSOUTH	21962	17	14446	1	1506.9	-8	10.4	11.4	9.8	11.5	30942	
21	AMOCO	21777	12	25325	-10	1220.0	-36	4.8	6.8	7.7	8.5	30568	-5
22	CHEVRON	21367	13	40900z	-4	1293.0	-40	3.2	5.1	7.5	8.5	34607	-
23	ELI LILLY	21105	19	5726	10	1314.7	17	23.0	21.7	25.7	26.5	8299	16
24	MICROSOFT	21039	45	2276	54	581.4	63	25.5	24.1	33.0	32.8	2128	56
25	WASTE MANAGEMENT	20916	22	7551	25	606.3	-15	8.0	11.8	9.1	14.7	11634	12
26	WALT DISNEY	20229	33	6627	10	674.3	-18	10.2	13.6	NA	16.5	10327	2
27	MINNESOTA MINING & MFG.	19805	24	13340	2	1154.0	-12	8.7	10.0	NA	18.3	11083	0
28	HEWLETT-PACKARD	18690	44	14949	10	856.0	11	5.7	5.7	11.8	11.3	12276	10
29	AMERICAN INTERNATIONAL GROUP	18308	25	15834y	6	1553.0	8	9.8	9.7	NA	14.1	69248	19
30	SOUTHWESTERN BELL	17449	34	9332	2	1156.5	5	12.4	12.1	11.2	13.2	23179	4
31	FORD MOTOR	17338	35	88286	-10	-2258.0	NM	NM	0.9	NM	-10.0	174429	0
32	FEDERAL NATIONAL MORTGAGE ASSN.	17062	48	13586y	7	1455.4	24	10.7	9.2	9.2	27.6	147072	10
33	BELL ATLANTIC	16731	26	12280	0	1331.6	1	10.8	10.7	NA	14.2	27882	0
34	ATLANTIC RICHFIELD	16152	21	17037x	-5	709.0	-58	4.2	9.4	10.5	10.5	24014	4
35	BOEING	15828	30	29314	6	1567.0	13	5.3	5.0	17.7	19.7	16118	13
36	AMERITECH	15798	29	10818	1	1165.5	-7	10.8	11.8	12.0	14.4	22290	3
37	PACIFIC TELESIS GROUP	15790	31	9895	2	1015.0	-1	10.3	10.6	10.6	13.1	21838	
38	SEARS, ROEBUCK	15785	47	57242y	2	1144.9	28	2.0	1.6	12.6	8.7	106435	1
39	ANHEUSER-BUSCH	15619	41	10996	2	939.8	12	8.5	7.8	15.6	21.8	9960	4
40	DOW CHEMICAL	15292	40	18807y	-5	942.0	-32	5.0	7.0	10.0	9.7	24727	3
41	TEXACO	14734	32	38322y	8	1294.0	-11	3.4	3.5	11.9	14.0	26182	
42	NYNEX	14671	37	13229	-3	600.8	-37	4.5	7.0	6.6	6.3	27478	3
43	MCDONALD'S	14308	43	6695	1	859.6	7	12.8	12.1	12.6	19.6	10809	6
44	SCHLUMBERGER	14308	36	6145	16	815.7	43	13.3	10.7	23.1	22.9	6854	1
45	EASTMAN KODAK	14084	39	19419	3	17.0	-98	0.1	3.7	NM	0.3	24790	4
46	US WEST	13835	38	10577	6	553.4	-54	5.2	12.0	6.5	5.8	27854	3
47	KELLOGG	13708	53	5787	12	606.0	21	10.5	9.7	30.1	28.9	3933	5
48	HOME DEPOT	12957	105	5137	35	249.2	52	4.9	4.3	13.1	15.6	2510	53
49	INTEL	12699	52	4779	22	818.6	26	17.1	16.6	18.4	18.5	6292	12
50	PACIFIC GAS & ELECTRIC	12423	51	9778	3	1026.4	4	10.5	10.4	NA	12.4	22901	4
51	SARA LEE	12203	63	12651	4	714.7	43	5.7	4.1	15.6	23.7	9754	23
52	EMERSON ELECTRIC	11911	56	7443	-4	637.7	3	8.6	8.0	18.4	18.8	6562	2
53	SCHERING-PLOUGH	11452	46	3616	9	645.6	14	17.9	17.0	34.3	34.9	4013	2
54	RJR NABISCO HOLDINGS	11217	428	14989	8	368.0	NM	2.5	NM	7.9	4.7	32131	-3
55	GENERAL MILLS	10964	62	7486	9	492.6	18	6.6	6.0	25.0	38.0	4240	14
56	J.P. MORGAN	10922	70	10314	-2	1114.0	44	10.8	7.4	30.4	19.6	103468	13
57	SYNTEX	10627	64	1958	16	451.0	15	23.0	23.3	34.5	38.5	2588	26
58	GILLETTE	10483	80	4684	8	427.4	16	9.1	8.5	27.5	41.6	3543	4
59	NATIONSBANK	10319	218	11594	-3	201.9	-66	1.7	5.0	17.4	4.6	110319	-3
60	AMERICAN EXPRESS	10152	42	25763y	6	789.0	133	3.1	1.4	43.1	10.8	153456	9



RAT E	12 MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	DIVIDENDS			SHARES			EARNINGS PER SHARE				INDUSTRY GROUP	
				YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST \$		VARI- ATION %
0	73/59	145	13	5.38	69	3	57	398	40.2	12	4.60	4.65	4.52	14.4	Fuel B
Y	44/27	82	NM	4.34	DEF	-1	35	618	61.7	12	-4.09	-8.85	0.78	117.9	Automotive A
0	33/20	227	25	1.20	31	39	51	198	44.9	12	1.04	1.18	1.33	3.8	Office equipment C
0	20/13	16	15	3.89	57	4	NA	71	5.9	12	1.82	1.26	1.67	10.8	Electrical B
5	54/45	168	15	6.12	89	-5	25	487	18.6	12	3.38	3.11	3.32	4.5	Telecomms. B
A	55/44	152	18	5.01	90	-10	52	496	28.2	12	3.77	2.45	3.11	14.8	Fuel B
2	80/60	141	17	5.36	89	-14	42	347	30.7	12	6.10	3.69	4.22	16.4	Fuel B
2	88/70	425	16	3.05	49	-3	64	293	56.9	12	3.91	4.50	5.23	1.5	Health care B
3	133/61	1188	48	0.00	0	79	33	178	187.4	06	1.56	2.47	3.54	2.5	Office equipment C
4	47/34	508	35	1.04	36	5	51	492	58.0	12	1.49	1.23	1.91	3.1	Services C
5	157/104	494	32	0.45	15	25	41	130	89.7	09	6.00	4.78	6.13	4.7	Leisure B
0	99/84	315	17	3.54	61	6	64	219	41.3	12	5.91	5.26	5.76	2.1	Manufacturing A
1	78/45	247	24	0.68	17	58	52	253	72.5	10	3.06	3.02	4.48	11.8	Office equipment B
2	102/79	167	12	0.58	7	-3	51	212	37.8	12	6.92	7.28	7.72	2.3	Nonbank fin. B
3	66/49	199	15	4.89	74	18	38	300	30.2	12	3.67	3.85	4.14	3.4	Telecomms. B
4	40/23	76	NM	4.46	DEF	18	50	483	61.3	12	1.86	-4.79	0.18	422.2	Automotive A
5	72/41	324	12	1.92	23	40	82	273	90.2	12	4.50	5.33	5.74	2.1	Nonbank fin. A
6	53/42	179	12	5.96	74	-6	30	396	27.4	12	3.38	3.41	3.52	5.7	Telecomms. B
7	134/99	240	23	5.37	125	-16	56	158	49.4	12	10.20	4.39	6.91	14.9	Fuel B
8	55/41	199	10	2.17	22	-3	48	343	87.9	12	4.01	4.56	4.96	3.0	Aerospace
9	69/56	195	14	5.94	80	-4	29	267	21.9	12	4.73	4.39	4.83	1.2	Telecomms. B
0	45/39	204	15	5.44	83	1	37	401	26.9	12	2.59	2.58	2.98	2.3	Telecomms. B
1	46/31	120	14	4.36	60	46	66	344	49.0	12	2.60	3.32	4.42	5.9	Retailing
2	62/47	363	17	2.04	34	23	55	285	35.5	12	2.96	3.26	3.67	1.4	Consumer C
3	60/46	159	16	4.60	75	9	50	271	52.9	12	5.10	3.46	3.31	14.2	Chemicals
4	70/56	173	12	5.61	69	-2	63	259	60.7	12	5.18	4.61	4.35	15.9	Fuel B
5	82/68	154	24	6.33	153	4	37	204	30.6	12	4.78	2.98	6.17	2.9	Telecomms. B
6	45/30	334	17	0.93	16	30	61	358	64.2	12	2.20	2.35	2.66	2.3	Leisure A
7	74/56	402	17	2.01	35	-4	50	240	60.2	12	2.40	3.42	3.20	6.3	Fuel C
8	51/39	213	NM	4.61	4000	7	56	325	69.1	12	2.17	0.05	4.15	6.0	Leisure D
9	40/34	144	24	6.16	151	-5	42	410	29.4	12	3.11	1.38	3.06	3.3	Telecomms. B
0	67/41	654	23	1.97	45	39	73	241	30.7	12	2.08	2.51	2.84	1.1	Food B
1	72/32	810	51	0.20	10	97	59	211	91.9	01	0.90	1.20	1.54	3.2	Retailing
2	69/39	287	16	0.00	0	33	74	204	281.6	12	3.20	3.92	4.19	7.9	Electrical D
3	33/24	164	13	5.51	73	27	36	418	25.2	12	2.10	2.24	2.50	4.8	Utilities A
4	58/34	429	24	1.95	47	59	45	238	39.2	06	1.91	2.15	2.44	1.2	Food B
5	58/42	352	19	2.60	49	24	64	224	31.0	09	2.75	2.83	3.07	2.0	Electrical A
6	68/47	619	19	2.33	44	22	63	202	79.6	12	2.50	3.01	3.54	1.7	Health care B
7	13/9	268	45	0.00	0	11	15	1122	67.3	12	-1.19	0.22	0.61	6.6	Consumer E
8	76/52	846	22	2.24	49	31	61	166	35.5	05	2.82	3.04d	3.49	1.4	Food B
9	71/44	196	10	3.78	39	35	69	190	75.9	12	3.99	5.63	5.65	7.4	Banks A
0	54/37	907	25	1.95	49	37	52	226	93.1	07	1.53	1.89	2.19	10.0	Health care B
1	56/34	1065	25	1.30	32	38	68	219	67.0	12	1.60	1.94	2.30	1.7	Consumer D
2	48/29	278	59	3.32	195	67	35	231	48.7	12	3.40	0.76	4.24	9.0	Banks C
3	30/18	147	14	4.65	63	-9	65	472	89.9	12	0.69	1.59	2.28	7.0	Nonbank fin. A

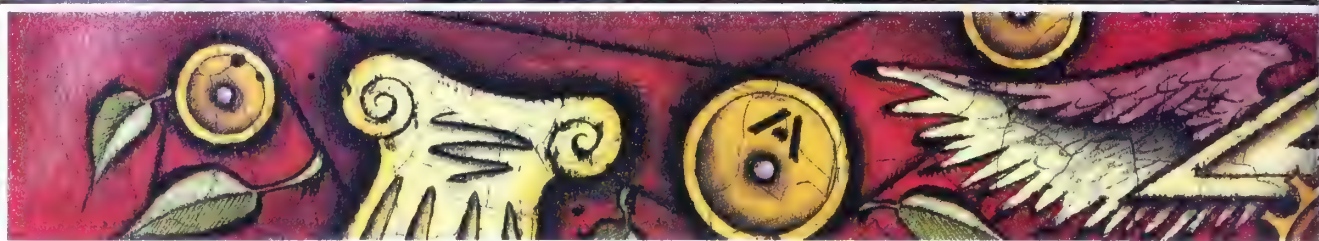
NOTES TO TABLES APPEAR ON PAGES 162-163



RANK	COMPANY	MARKET VALUE		SALES	CHANGE FROM 1991	PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO PANK	MONTHS '92 \$ MIL.		MONTHS '92 \$ MIL.	RANGE FROM '91	MONTHS '92	MONTHS 1990	ON INVESTED CAPITAL	ON COMMON EQUITY	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990
61	KMART	10088	74	34969y	8	859.0	14	2.5	2.3	11.1	15.5	15999	1
62	BERKSHIRE HATHAWAY	9970	60	30280	33	481.3	27	15.9	16.6	7.1	6.6	12771	3
63	MOTOROLA	9948	66	11341	4	454.0	-9	4.0	4.6	9.8	9.8	9375	
64	BAXTER INTERNATIONAL	9877	58	8921	10	591.0	1378	6.6	0.5	12.2	14.4	9340	1
65	DUN & BRADSTREET	9859	71	4643	-4	508.5	0	11.0	10.5	25.3	24.6	4777	
66	MARION MERRELL DOW	9843	49	2851	16	585.0	20	20.5	19.8	34.8	41.7	2762	2
67	TOYS 'R' US	9831	75	61240	11	339.5	4	5.5	5.9	14.7	15.7	4958	1
68	THE LIMITED	9808	59	6149y	17	403.3	1	6.6	7.6	16.8	23.7	3536	1
69	SOUTHERN	9627	65	8050	0	984.5	37	12.2	8.9	9.1	12.6	22888	
70	TIME WARNER	9492	99	12021	4	-99.0	NM	NM	NM	NA	-8.2	24889	
71	BANKAMERICA	9467	85	12268	0	1124.0	28	9.2	7.1	12.6	15.8	115509	
72	UNION PACIFIC	9430	81	7029	1	64.0	-90	0.9	8.9	3.6	1.6	13150	
73	H. J. HEINZ	9392	55	6553	1	648.7	19	9.9	8.4	27.1	28.5	6172	2
74	CAMPBELL SOUP	9309	61	6133	-3	450.9	697	7.4	0.9	19.2	23.5	4376	
75	INTERNATIONAL PAPER	9021	90	12688	-2	399.0	-30	3.1	4.4	6.7	7.1	14941	
76	SCECORP	8963	72	7503	4	744.8	-10	9.9	11.5	9.5	12.4	18119	
77	AMERICAN BRANDS	8940	57	14064x	2	806.1	37	5.7	4.3	15.6	20.0	13727	
78	ARCHER DANIELS MIDLAND	8818	89	8801	5	499.1	9	5.7	5.5	10.7	11.7	6964	1
79	MCI COMMUNICATIONS	8777	86	8433	10	551.0	84	6.5	3.9	11.9	18.7	8884	8
80	WARNER-LAMBERT	8715	50	5059	8	140.8	71	2.8	10.3	8.9	8.7	3602	10
81	BANC ONE	8324	127	4154	18	529.5	25	12.7	12.1	17.9	16.4	33180	17
82	MONSANTO	8311	78	8864	-1	296.0	-46	3.3	6.1	7.7	7.5	9227	
83	NOVELL	8279	185	710	35	184.2	68	25.9	20.8	27.1	27.5	797	48
84	NORFOLK SOUTHERN	8273	88	4451	-4	29.7	-95	0.7	12.0	0.9	0.7	10148	
85	KIMBERLY-CLARK	8244	87	6777	6	508.3	18	7.5	6.7	17.5	20.2	5650	7
86	GENERAL RE	8155	68	3207	9	656.7	7	20.5	20.8	16.5	18.3	12405	12
87	AMGEN	8043	134	682	128	97.9	2432	14.3	1.3	17.3	18.4	866	86
88	TEXAS UTILITIES	8007	84	4893	8	-288.4	NM	NM	21.3	NM	-6.5	18793	1
89	RHONE-POULENC RORER	7929	110	3824	31	326.5	NM	8.5	0.0	20.5	36.9	4143	1
90	APPLE COMPUTER	7583	82	6496	13	325.4	-35	5.0	8.7	16.9	16.9	3745	19
91	COMMONWEALTH EDISON	7523	69	6276	18	94.9	-26	1.5	2.4	1.6	0.3	20084	-2
92	CAPITAL CITIES ABC	7320	73	5382	0	374.7	-22	7.0	8.9	9.3	10.4	7129	13
93	ITT	7307	94	20421	-1	817.0	-23	4.0	5.1	7.9	9.8	51880	8
94	DIGITAL EQUIPMENT	7287	54	14238	9	-864.5	NM	NM	NM	NM	-11.6	11944	3
95	LOEWS	7237	77	13620y	11	904.3	12	6.6	6.6	13.4	16.6	39206	13
96	J. C. PENNEY	7225	95	17295	-1	528.0	-9	3.1	3.3	9.1	13.3	12520	2
97	FEDERAL HOME LOAN MORTGAGE ASSN.	7202	149	4219	6	555.0	34	13.2	10.4	14.2	22.6	46860	15
98	MAY DEPARTMENT STORES	7202	93	10615y	5	515.0	3	4.9	5.0	11.5	22.8	8636	8
99	FOOD LION	7132	123	6439	15	205.2	19	3.2	3.1	17.8	24.8	1992	28
100	XEROX	7091	125	17830y	-1	454.0	-25	2.5	3.4	9.4	8.6	31658	0
101	UPJOHN	7009	79	3426	13	537.4	17	15.7	15.1	21.6	31.4	4145	13
102	ALLIED-SIGNAL	6769	165	11831	-4	-273.0	NM	NM	3.7	NM	-9.2	10382	-1
103	WESTINGHOUSE ELECTRIC	6742	67	12794	-1	-1086.0	NM	NM	2.1	NM	-38.6	20159	-9
104	GANNETT	6738	96	3382	-2	301.6	-20	8.9	11.0	12.0	20.3	3684	-4
105	WEYERHAEUSER	6649	141	8702	-4	-100.9	NM	NM	4.4	NM	-2.6	16928	4



RANK	12-MONTH HIGH- LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	DIVIDENDS		SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
				YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN- OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST. \$	VARI- ATION %
54/34	182	12	3.52	44	52	77	202	76.7	01	3.78	4.03	4.36	2.3	Retailing
9125/7760	150	23	0.00	0	8	9	1	5.0	12	344.00	384.00	315.00	NM	Nonbank fin. A
83/54	215	22	1.01	22	28	72	132	87.9	12	3.80	3.44	4.19	5.3	Electrical B
41/30	250	17	2.09	36	18	63	279	55.4	12	-0.05	2.03	2.36	2.1	Health care D
58/43	477	19	3.91	76	30	71	178	36.3	12	2.80	2.85	3.12	1.3	Publishing/TV B
39/27	708	17	2.58	44	-5	12	276	32.3	12	1.73	2.08	2.41	2.1	Health care B
39/25	454	29	0.00	0	25	62	289	68.7	01	1.11	1.17d	1.49	4.0	Retailing
33/21	577	24	1.03	25	24	51	362	77.7	01	1.10	1.11	1.48	6.1	Retailing
35/26	138	11	7.21	79	20	30	316	32.6	12	1.91	2.78	2.82	2.1	Utilities A
125/78	113	NM	0.98	DEF	-5	64	93	103.0	12	-13.67	-9.60	-5.06	21.1	Publishing/TV B
45/31	141	9	3.01	27	39	58	219	119.8	12	3.85	4.81	4.61	9.8	Banks D
52/36	234	NM	2.92	439	27	59	203	48.8	12	3.09	0.31	3.58	3.1	Transportation B
49/35	413	16	2.95	46	14	50	256	46.6	04	2.13	2.33d	2.57	5.1	Food B
44/35	484	23	1.89	44	7	32	252	32.5	07	0.02	1.58	1.93	1.6	Food B
78/59	161	21	2.27	47	23	57	122	92.7	12	5.21	3.61	4.91	9.6	Paper B
47/37	158	13	6.67	85	13	32	220	31.7	12	3.60	3.21	3.66	1.6	Utilities A
48/38	226	11	4.02	45	4	53	206	43.1	12	2.99	3.91	4.34	2.8	Consumer E
33/20	206	19	0.35	7	39	51	312	51.0	06	1.55	1.49	1.74	2.3	Food B
36/25	314	17	0.30	5	30	64	262	129.5	12	1.06	2.01	2.32	4.7	Telecomms. A
82/64	539	62	3.15	194	-12	65	135	98.3	12	3.61	1.05	4.78	0.8	Health care B
50/29	266	16	2.23	36	68	53	176	42.5	12	2.51	2.91	3.26	4.6	Banks B
76/55	210	29	3.08	89	16	61	123	77.1	12	4.23	2.33	5.48	3.1	Chemicals
65/23	1234	52	0.00	0	153	70	144	247.7	10	0.68	1.10	1.58	4.4	Office equipment C
66/44	202	NM	3.11	900	42	58	143	37.2	12	3.43	0.20	4.16	3.6	Transportation B
53/42	327	16	3.18	52	24	68	160	49.7	12	2.70	3.18	3.27	3.1	Paper B
105/85	230	13	1.78	23	-1	84	87	50.2	12	6.89	7.46	7.01	3.7	Nonbank fin. B
78/30	1514	91	0.00	0	115	61	132	328.5	12	0.26	0.67	1.78	11.2	Health care B
43/34	127	NM	7.89	DEF	14	63	211	57.4	12	4.40	-1.98	3.53	8.2	Utilities A
69/39	897	24	0.97	24	52	21	138	26.2	12	0.01	2.37	3.05	8.2	Health care B
73/40	394	25	0.75	19	19	67	118	393.0	09	3.77	2.58	4.41	6.1	Office equipment B
43/35	131	NM	8.48	3750	0	52	213	57.3	12	0.22	0.08	3.05	12.8	Utilities A
504/358	203	20	0.05	1	-5	62	17	42.9	12	27.71	22.33	26.67	5.0	Publishing/TV A
67/50	94	10	2.88	29	19	69	114	58.6	12	8.06	6.42	6.05	8.8	Conglomerates
83/49	97	NM	0.00	0	-15	69	125	128.9	06	0.59	-5.08	0.76	67.1	Office equipment B
115/98	133	8	0.93	8	5	51	67	33.8	12	11.01	13.14	11.82	8.6	Nonbank fin. A
66/47	195	15	4.28	62	20	63	117	56.9	01	4.59	4.23	4.96	5.4	Retailing
139/70	294	13	1.67	22	71	69	60	88.6	12	6.90	9.25	10.49	3.3	Nonbank fin. A
63/47	331	15	2.78	40	25	67	123	44.1	01	3.88	4.02	4.47	3.1	Retailing
27/15	863	34	0.77	26	43	7	322	15.8	12	0.54	0.64	0.77	0.0	Food C
82/52	164	20	3.93	77	43	77	93	76.6	12	5.51	3.91	5.85	5.5	Office equipment B
49/38	419	14	3.40	46	-8	53	175	129.3	12	2.48	2.96	3.20	3.1	Health care B
51/27	227	NM	2.04	DEF	72	64	138	70.7	12	3.35	-2.00	3.71	3.5	Conglomerates
31/14	240	NM	3.62	DEF	-20	43	339	93.8	12	0.91	-3.46	1.99	10.1	Electrical A
48/35	454	23	2.65	62	21	78	144	44.4	12	2.36	2.00	2.40	3.8	Publishing/TV B
36/23	171	NM	3.65	DEF	50	56	202	61.2	12	1.87	-0.50	1.61	14.3	Paper A



RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %
106	AMP	6508	114	3095	2	259.3	-10	8.4	9.4	14.5	13.6	3007	
107	DUKE POWER	6474	122	3817	3	583.6	8	15.3	14.5	9.8	13.0	10471	
108	THE GAP	6409	198	2519	30	229.9	59	9.1	7.5	30.4	33.9	1147	40
109	COOPER INDUSTRIES	6381	120	6163y	-1	393.2	9	6.4	5.8	10.1	10.7	7149	0
110	CONAGRA	6376	108	20485	15	345.4	25	1.7	1.6	12.2	15.5	10667	2
111	CORNING	6345	119	3259	11	311.2	8	9.5	9.8	13.0	15.3	3853	10
112	COLGATE-PALMOLIVE	6332	140	6060	6	124.9	-61	2.1	5.6	7.3	11.6	4324	2
113	AMERICAN TV & COMMUNICATIONS	6314	146	1220	10	160.9	34	13.2	10.9	15.7	25.0	2047	-2
114	CPC INTERNATIONAL	6302	100	6189	7	404.2	8	6.5	6.5	NA	29.3	4510	0
115	PPG INDUSTRIES	6291	118	5673	-6	201.4	-58	3.6	7.9	7.6	7.6	6056	-
116	UNITED TECHNOLOGIES	6232	101	21263y	-2	-1020.9	NM	NM	3.4	NA	-24.1	15985	0
117	RAYTHEON	6047	133	9274	0	591.7	6	6.4	6.0	20.5	18.5	6087	-
118	AUTOMATIC DATA PROCESSING	6043	148	1811y	4	238.9	9	13.2	12.7	20.3	20.7	1659	10
119	PUBLIC SERVICE ENTERPRISE GROUP	6036	112	5093	6	573.3	0	11.3	11.9	8.7	11.4	14820	0
120	TELE-COMMUNICATIONS	5929	115	3792a	8	-218.0	NM	NM	NM	NM	-47.1	12391	-
121	ROCKWELL INTERNATIONAL	5914	91	11549	-7	582.3	-6	5.0	5.0	13.2	13.8	9236	-5
122	ALUMINUM CO. OF AMERICA	5913	109	9884	-8	62.7	-79	0.6	2.8	4.0	1.2	11260	-2
123	PHILLIPS PETROLEUM	5883	83	13259y	-5	98.0	-82	0.7	3.9	4.7	3.5	11500	-5
124	AMERICAN CYANAMID	5875	130	4986	9	358.8	233	7.2	2.4	13.0	13.6	5189	0
125	CSX	5874	191	8636	5	-76.0	NM	NM	4.4	2.3	-2.0	12798	0
126	RALSTON PURINA	5864	104	7448	4	387.3	-3	5.2	5.6	15.0	41.3	4775	0
127	MERRILL LYNCH	5855	215	12363y	11	696.1	263	5.6	1.7	NA	18.0	86259	27
128	USX-MARATHON GROUP	5842	NR	13975	-4	-71.0	NM	NM	3.5	NA	-2.4	11644	-2
129	STUDENT LOAN MARKETING ASSN.	5796	144	3257	-10	345.1	15	10.6	8.3	6.9	35.7	45320	10
130	UST	5749	150	907x	19	265.9	19	29.3	29.2	56.1	56.1	657	5
131	MCCAW CELLULAR COMMUNICATIONS	5739	156	1366	32	-351.1	NM	NM	35.8	NM	-20.1	8717	0
132	CONSOLIDATED EDISON CO. OF N.Y.	5736	124	5873	2	566.9	-1	9.7	10.0	8.6	11.4	11207	7
133	ALBERTSON'S	5733	121	8680	6	257.8	10	3.0	2.8	20.7	22.1	2186	11
134	OCCIDENTAL PETROLEUM	5701	107	10096	-12	379.0	NM	3.8	NM	NA	8.5	16115	-13
135	CHEMICAL BANKING	5679	384	14128	-11	154.0	-65	1.1	2.8	NA	0.4	138930	2
136	AMERICAN ELECTRIC POWER	5674	128	5047	-3	551.5	0	10.9	10.6	9.0	11.8	14125	2
137	CHUBB	5673	111	4579y	7	552.0	6	12.1	12.2	12.0	15.6	13775	12
138	GEORGIA-PACIFIC	5661	176	11524	-9	-79.0	NM	NM	2.9	-5.0	-2.7	10622	-12
139	FPL GROUP	5656	145	5249	3	417.4	22	8.0	6.7	9.1	11.2	11282	4
140	READER'S DIGEST ASSOCIATION	5650	167	2465	12	220.8	16	9.0	8.6	24.8	30.0	1913	12
141	PACIFICORP	5576	126	4007	4	507.2	7	12.7	12.3	NA	14.1	13229	7
142	CITICORP	5535	132	31839	-17	-914.0	NM	NM	0.8	NM	-14.8	224060	-2
143	PARAMOUNT COMMUNICATIONS	5490	137	4069a	4	147.9	-36	3.6	5.9	5.1	3.8	6641	2
144	DOMINION RESOURCES	5480	147	3786	7	511.6	2	13.5	14.3	9.1	12.0	11201	2
145	U.S. SURGICAL	5383	243	844	64	91.2	98	10.8	9.0	17.1	27.6	742	61
146	NIKE	5375	168	3212	20	305.3	6	9.5	10.8	25.8	25.5	1746	19
147	MARSH & MCLENNAN	5370	106	2779y	2	305.5	0	11.0	11.2	23.6	28.5	2382	-1
148	HOUSTON INDUSTRIES	5296	151	4444	6	463.6	20	10.4	9.3	8.7	11.8	12051	1
149	PNC FINANCIAL	5277	225	4470	-8	389.8	450	8.7	1.5	15.8	11.7	44892	-1
150	PHILADELPHIA ELECTRIC	5253	162	3976	7	534.7	405	13.4	2.9	8.8	12.1	12544	0



RANK	DIVIDENDS			SHARES			EARNINGS PER SHARE				INDUSTRY GROUP			
	12 MONTH HIGH/LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI TUTIONS HOLDING %	SHRS OUT MIL	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST. \$	VARIATION %
69/47	340	25	2.48	62	28	77	106	45.4	12	2.70	2.45	2.87	4.2	Electrical D
35/27	159	12	5.44	66	18	44	205	30.9	12	2.40	2.60	2.69	1.5	Utilities A
59/22	946	28	0.71	20	124	42	142	93.9	01	1.02	1.62	1.90	3.2	Retailing
59/47	200	19	2.18	41	15	61	112	41.2	12	2.81	3.04	3.42	3.8	Electrical A
37/27	309	18	1.91	34	2	41	226	50.9	05	1.42	1.61d	1.89	3.7	Food B
43/27	314	20	1.83	36	26	55	193	64.5	12	1.54	1.66	1.88	3.2	Manufacturing A
51/36	707	61	2.27	138	31	57	135	61.9	12	2.28	0.77	2.90	1.4	Consumer D
60/36	981	39	0.00	0	42	NA	109	42.7	12	1.10	1.47	1.85	7.0	Publishing/TV A
94/77	469	16	2.64	42	8	63	76	53.5	12	4.83	5.22	5.76	1.0	Food B
61/45	237	31	3.11	97	12	46	106	42.4	12	4.43	1.90	3.29	9.4	Housing A
57/42	139	NM	3.52	DEF	5	72	122	74.1	12	5.91	-8.91	4.52	6.2	Aerospace
91/73	189	10	2.87	29	22	71	67	64.8	12	8.53	8.95	9.71	1.4	Electrical B
49/30	524	27	0.92	25	43	68	140	40.9	06	1.44	1.63	1.83	1.1	Office equipment C
30/25	127	11	8.11	89	9	33	227	38.7	12	2.56	2.43	2.50	6.0	Utilities A
18/13	1281	67	0.00	0	15	76	354	90.2	12	-0.81	0.25d	0.10	70.0	Publishing/TV A
29/24	140	10	3.50	36	3	50	225	29.2	09	2.56	2.57	2.51	4.0	Conglomerates
73/54	117	98	2.30	225	11	74	85	86.2	12	3.40	0.71	3.26	36.8	Metals A
30/22	212	60	4.95	295	-12	44	260	48.4	12	2.18	0.38	1.43	24.5	Fuel B
69/51	222	16	2.38	39	13	63	93	83.2	12	1.15	3.85	4.52	3.3	Chemicals
61/35	156	NM	2.65	DEF	61	58	102	59.9	12	3.63	-0.75	4.59	3.9	Transportation B
60/48	661	16	2.25	36	7	47	110	47.3	09	3.23	3.34	3.74	3.5	Food B
67/29	156	9	1.75	17	99	56	103	153.0	12	1.59	6.02	5.99	7.2	Nonbank fin. A
33/21	182	NM	6.19	DEF	NA	70	258	NA	12	1.94	-0.31	0.98	23.5	Fuel B
76/48	619	18	1.60	28	28	82	93	76.4	12	2.96	3.55	4.42	7.5	Nonbank fin. A
34/21	1214	23	2.94	68	38	53	211	38.3	12	0.98	1.18	1.38	2.2	Consumer E
36/20	329	NM	0.00	0	37	40	182	76.4	12	1.92	-2.04	-1.81	25.4	Telecomms. A
29/23	124	11	7.56	82	16	26	228	42.6	12	2.34	2.32	2.41	2.5	Utilities A
51/33	492	22	1.30	29	13	36	133	49.2	01	1.75	1.94	2.18	2.3	Food C
25/17	131	15	5.26	80	1	31	300	66.5	12	-5.80	1.25	0.95	36.8	Fuel B
34/15	100	NM	3.21	909	110	60	182	103.7	12	2.38	0.11	3.15	14.9	Banks A
34/27	135	11	7.80	89	17	30	185	36.4	12	2.65	2.70	2.90	2.8	Utilities A
78/61	160	10	2.27	23	4	73	87	63.5	12	6.07	6.32	6.16	3.6	Nonbank fin. B
72/41	195	NM	2.47	DEF	58	61	87	92.1	12	4.28	-0.92	1.90	25.3	Paper A
37/29	169	14	7.25	104	22	38	171	44.2	12	-2.86	2.31	2.76	2.9	Utilities A
50/31	773	27	1.70	46	41	36	120	29.8	06	1.48	1.74	1.95	2.1	Publishing/TV B
25/21	164	11	7.06	81	4	29	262	30.4	12	1.85	1.86	1.90	5.3	Utilities A
18/9	74	NM	0.00	0	15	45	346	124.8	12	0.57	-3.22	1.05	50.5	Banks A
48/36	141	45	1.50	68	10	48	118	73.8	10	2.16	1.03	2.09	7.2	Leisure B
39/30	143	12	6.90	81	20	41	159	35.3	12	2.92	2.94	3.03	1.3	Utilities A
135/47	1632	65	0.29	19	130	63	52	154.2	12	0.89	1.58	2.27	4.0	Health care D
78/35	449	16	0.84	14	53	51	75	130.8	05	3.77	4.37d	4.99	4.2	Consumer A
87/70	501	18	3.48	62	4	61	72	38.4	12	4.15	4.18	4.33	5.8	Nonbank fin. A
44/35	149	13	7.22	90	21	53	129	59.1	12	2.67	3.28	3.36	3.6	Utilities A
52/27	159	12	4.32	54	99	52	107	45.4	12	0.73	3.95	4.30	2.8	Banks A
26/19	135	11	5.45	60	34	36	220	41.9	12	0.07	2.15	2.24	4.0	Utilities A



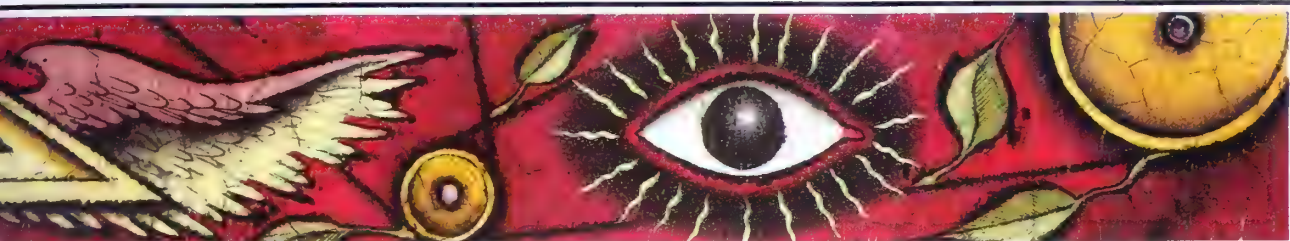
	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %
151	MELVILLE	5162	129	9886	14	346.7	-10	3.5	4.4	NA	21.9	4229	4
152	PITNEY BOWES	5160	164	3333	4	287.9	39	8.6	6.5	15.7	16.0	6381	5
153	AMR	5157	188	12887	10	-239.9	NM	NM	NM	NM	-6.1	15795	18
154	RUBBERMAID	5083	184	1667	9	162.7	13	9.8	9.4	18.4	18.4	1245	12
155	UNOCAL	5073	92	9845y	-10	73.0	-82	0.7	3.7	3.9	2.9	9836	1
156	HONEYWELL	5039	154	6193	-2	331.1	-11	5.3	5.9	16.8	19.3	4807	1
157	ENTERGY	5001	152	4051	2	544.8	1	13.4	13.6	8.8	11.4	14612	-1
158	CATERPILLAR	4995	117	10182	-11	-404.0	NM	NM	1.8	NM	-10.0	12042	1
159	CNA FINANCIAL	4913	131	11131	12	612.5	67	5.5	3.7	NM	12.9	35673	15
160	WACHOVIA	4853	200	3138	-2	229.5	-34	7.3	10.8	22.7	11.0	33158	0
161	TENNECO	4845	102	13662	-6	-674.0	NM	NM	3.9	NM	-30.9	18696	-2
162	AIR PRODUCTS & CHEMICALS	4840	177	2967	0	252.5	5	8.5	8.1	10.8	13.0	4417	10
163	BANKERS TRUST NEW YORK	4832	182	6844	-14	667.0	0	9.7	8.4	NA	21.7	63959	1
164	SUNTRUST BANKS	4809	204	3361	-1	370.7	6	11.0	10.3	17.5	14.8	34554	3
165	AETNA LIFE & CASUALTY	4802	139	19196	-3	505.2	-18	2.6	3.1	NM	6.8	91988	3
166	CENTRAL & SOUTH WEST	4801	170	3047	11	401.0	4	13.2	14.1	10.3	13.2	9388	3
167	QUAKER OATS	4792	155	5570	5	256.6	13	4.6	4.3	18.5	30.0	2844	-8
168	SECURITY PACIFIC	4788	190	8922	-14	-774.5	NM	NM	1.6	NM	-22.6	76411	-10
169	SPRINT	4769	116	8780	5	367.5	19	4.2	3.7	10.2	14.8	10500	-1
170	BURLINGTON RESOURCES	4765	142	1754	-3	197.4	-4	11.3	11.3	6.5	6.8	6290	-1
171	BORDEN	4738	135	7235	-5	294.9	-19	4.1	4.8	11.0	14.9	5481	4
172	DAYTON HUDSON	4737	143	16115a	9	301.0	-27	1.9	2.8	8.6	12.4	9485	11
173	CHRYSLER	4709	207	29400y	-4	-538.0	NM	NM	0.2	NM	-8.7	43076	-7
174	DILLARD DEPARTMENT STORES	4691	174	4036y	12	206.2	13	5.1	5.1	10.8	13.9	3499	16
175	MEDTRONIC	4685	195	1125	14	154.3	23	13.7	12.8	23.6	20.8	1120	15
176	CARNIVAL CRUISE LINES	4604	234	1405	12	253.8	8	18.1	18.7	NA	19.5	2887	8
177	AMERICAN GENERAL	4598	157	4395	-1	480.0	-15	10.9	12.7	10.8	11.1	36105	7
178	NORWEST	4588	262	4420	7	398.5	260	9.0	2.7	NA	17.5	38502	4
179	DETROIT EDISON	4556	160	3592	0	568.0	10	15.8	14.4	11.6	19.2	10464	-1
180	TIMES MIRROR	4530	175	3624y	0	82.0	-55	2.3	5.0	4.3	4.3	4052	-3
181	TURNER BROADCASTING SYSTEM	4481	308	1480	6	42.9	NM	2.9	NM	7.1	NM	2255	8
182	WALGREEN	4446	171	6901	11	198.3	11	2.9	2.9	17.1	18.0	2199	9
183	NEWMONT GOLD	4431	163	573	-11	125.9	-11	22.0	22.0	17.8	17.8	817	16
184	PRIMERICA	4372	199	6608y	7	478.8	28	7.2	6.0	13.6	15.3	22000	12
185	GOODYEAR TIRE & RUBBER	4249	422	10907	-3	74.5	NM	0.7	NM	2.0	3.7	8511	-5
186	FIRST UNION	4222	280	4321	6	318.7	5	7.4	7.5	15.9	10.6	46085	13
187	COSTCO WHOLESALE	4204	255	5614	27	91.5	63	1.6	1.3	13.1	12.9	1331	33
188	MORGAN STANLEY GROUP	4174	232	6785y	16	475.1	76	7.0	4.6	65.5	21.7	70742	18
189	CHEMICAL WASTE MANAGEMENT	4169	136	1358	18	100.8	-43	7.4	15.3	8.3	11.5	1849	33
190	CAROLINA POWER & LIGHT	4169	181	2686	3	377.0	34	14.0	10.7	10.2	14.7	7523	0
191	SYSCO	4128	183	8469	8	161.6	11	1.9	1.8	12.3	16.1	2263	5
192	MEDCO CONTAINMENT SERVICES	4105	268	1551	33	84.5	107	5.5	3.5	10.0	14.8	1105	83
193	VIACOM	4073	258	1712	7	-46.6	NM	NM	NM	NM	-6.4	4197	5
194	FREEPORT-MCMORAN COPPER & GOLD	4052	290	468	8	102.0	13	21.8	20.8	17.0	59.1	1158	72
195	CIGNA	4016	197	18750	3	453.0	42	2.4	1.8	7.0	8.1	66700	5



RANK	DIVIDENDS				SHARES				EARNINGS PER SHARE				INDUSTRY GROUP		
	12 MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$		ANALYSTS' ESTIMATES	
														1992 EST. \$	VARI- ATION %
55/38	342	16		2.96	46	8	80	103	44.4	12	3.59	3.20	3.90	5.4	Retailing
70/49	287	18		2.40	43	34	76	79	45.1	12	2.60	3.60	4.09	2.2	Office equipment A
79/55	132	NM		0.00	0	27	77	68	177.9	12	-0.64	-3.54	3.83	56.9	Transportation A
38/22	574	31		1.07	33	53	45	160	31.9	12	0.90	1.02	1.17	1.7	Manufacturing A
30/21	201	70		3.24	226	-18	60	235	67.0	12	1.71	0.31	1.03	27.2	Fuel B
76/52	293	15		2.28	35	24	72	70	71.5	12	4.90	4.70	5.09	1.6	Electrical C
30/23	118	10		5.07	53	24	68	181	52.4	12	2.44	2.64	2.59	3.5	Utilities A
58/38	124	NM		1.21	DEF	-9	68	101	74.2	12	2.07	-4.00	0.75	138.7	Manufacturing C
105/76	104	8		0.00	0	-6	NA	62	8.2	12	5.77	9.80	4.77	8.8	Nonbank fin. B
62/47	233	21		3.52	75	28	46	85	26.2	12	4.20b	2.65	4.79	3.1	Banks C
50/27	217	NM		4.09	DEF	-16	57	124	101.0	12	4.37	-5.62	2.55	19.2	Conglomerates
44/30	249	19		1.82	35	35	72	113	53.5	09	2.08	2.23	4.73	1.9	Chemicals
68/40	166	8		4.78	36	41	74	82	71.3	12	7.80	7.75	7.64	7.5	Banks A
40/25	192	13		2.66	34	53	54	128	27.1	12	2.75	2.90	3.13	2.2	Banks C
49/32	65	10		6.33	60	7	73	110	74.1	12	5.52	4.59	5.54	6.9	Nonbank fin. B
27/21	169	13		6.04	77	23	50	188	35.5	12	1.90	2.00	2.08	2.9	Utilities A
76/55	570	21		2.68	56	16	51	75	61.9	06	2.93	3.05	3.59	1.7	Food B
37/21	133	NM		0.00	0	33	51	128	137.0	12	1.03	-6.37	2.97	22.9	Banks D
32/21	193	13		4.57	60	-10	61	218	60.7	12	1.43	1.68	1.96	8.7	Telecomms. A
44/33	164	25		1.93	47	1	65	131	61.6	12	1.46	1.48	1.63	14.1	Fuel B
39/29	240	16		3.55	57	2	48	148	55.1	12	2.46	2.00	2.53	2.0	Food B
80/56	229	18		2.29	40	2	75	71	99.0	01	5.41	3.80d	5.04	9.1	Retailing
18/10	77	NM		3.72	DEF	25	49	292	79.6	12	0.30	-2.22	0.10	5.8	Automotive A
137/96	316	23		0.19	4	35	81	37	87.5	01	5.01	5.53	6.57	3.5	Retailing
99/53	630	29		0.61	18	55	68	60	68.7	04	2.25	2.68d	3.15	2.5	Health care D
33/18	354	18		1.71	30	90	22	141	38.6	11	1.53	1.85	2.01	4.5	Leisure D
46/36	106	10		4.92	49	16	71	109	38.7	12	4.69	4.25	4.59	1.7	Nonbank fin. B
38/24	211	12		2.84	34	54	74	130	47.2	12	0.89	2.95	3.29	2.7	Banks B
35/28	163	9		6.06	52	14	36	147	36.5	12	3.26	3.64	3.62	4.4	Utilities A
38/26	237	55		3.06	169	29	45	129	25.0	12	1.40	0.64	1.53	9.2	Publishing/TV B
28/13	NEG	NM		0.04	19	78	4	176	2.6	12	-0.42	0.06	0.41	53.7	Publishing/TV A
40/29	405	23		1.44	33	18	47	123	43.9	08	1.42	1.58	1.79	1.1	Health care A
47/34	627	35		0.12	4	20	NA	105	13.1	12	1.35	1.20	1.29	10.9	Metals C
43/27	140	9		1.24	12	37	74	109	74.8	12	3.27	4.27	4.59	3.3	Nonbank fin. A
65/20	213	48		0.67	32	214	62	71	141.2	12	-0.66	1.24	3.64	20.3	Automotive C
39/19	157	14		3.56	49	95	46	121	61.4	12	2.52	2.55	3.18	4.7	Banks C
43/20	593	49		0.00	0	92	61	116	193.4	08	0.47	0.74	0.93	3.2	Retailing
68/35	203	10		1.65	16	61	39	73	57.3	12	3.38	5.93	5.75	3.8	Nonbank fin. A
25/17	475	42		0.98	41	-12	15	205	44.1	12	0.85	0.49	0.85	5.9	Services C
54/44	174	11		6.09	70	19	32	80	34.0	12	3.16	4.53	4.54	2.6	Utilities A
48/34	412	27		0.90	24	22	56	93	52.4	06	1.45	1.67	1.88	1.6	Food A
35/17	716	68		0.06	4	82	88	142	213.5	06	-0.06	0.43	0.58	1.7	Health care A
37/24	557	NM		0.00	0	33	6	120	4.3	12	-0.84	-0.41	0.56	32.1	Publishing/TV A
45/21	2349	40		2.70	107	105	14	91	24.7	12	1.07	1.12	1.29	15.5	Metals C
62/41	72	9		5.42	48	19	81	72	57.9	12	4.20	6.34	5.48	6.6	Nonbank fin. B



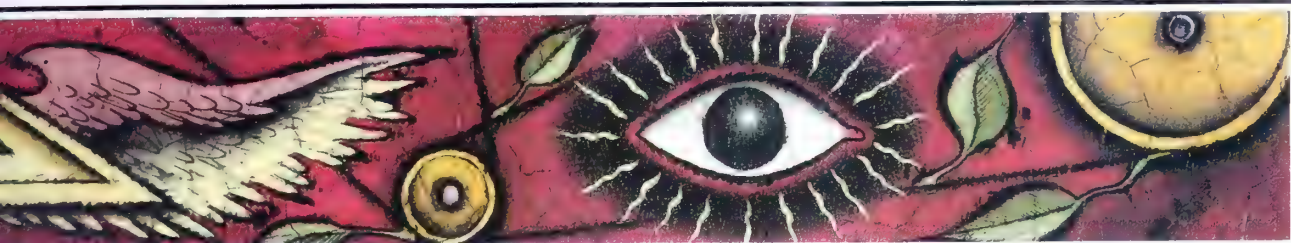
RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %
196	MASCO	4002	201	3141	-2	44.9	-68	1.4	4.3	3.3	2.5	3786	
197	INTERNATIONAL FLAVORS & FRAGRANCES	3960	209	1017	6	168.7	8	16.6	16.3	18.9	18.3	1217	
198	DEERE	3916	169	7070y	-8	3.0	-99	0.0	3.8	NM	0.1	11623	
199	R.R. DONNELLEY & SONS	3913	178	3915	12	204.9	-9	5.2	6.5	10.4	11.8	3404	
200	HUMANA	3881	138	6099	20	356.0	11	5.8	6.3	14.8	17.6	4484	
201	LIN BROADCASTING	3881	202	468	24	-170.2	NM	NM	NM	-18.6	NM	2799	
202	FIRST INTERSTATE BANCORP	3875	299	5120	-15	-288.1	NM	NM	7.3	NM	-16.0	48922	
203	W.R. GRACE	3799	252	6049	1	219.2	8	3.6	3.4	9.1	11.4	6007	
204	WOOLWORTH	3746	153	9914y	1	-53.0	NM	NM	3.2	NM	-2.3	5292	
205	GENUINE PARTS	3737	217	3435	3	207.7	1	6.0	6.2	18.4	19.0	1452	
206	HERSHEY FOODS	3709	192	2899	7	219.5	2	7.6	8.0	15.0	16.4	2342	
207	GREAT LAKES CHEMICAL	3688	222	1308	23	157.5	12	12.0	13.2	24.5	18.8	1649	
208	PENNSYLVANIA POWER & LIGHT	3668	208	2560	6	348.4	1	13.6	14.2	NA	13.3	7935	
209	CENTEL	3617	231	1181	3	112.4	139	9.5	4.1	8.0	9.6	3492	
210	H&R BLOCK	3556	251	1328y	21	150.7	28	11.3	10.7	26.4	26.4	695	
211	UAL	3555	213	11663	6	-331.9	NM	NM	0.9	NM	-18.0	9327	
212	ARCO CHEMICAL	3548	196	2837	0	188.0	-39	6.6	10.9	8.5	11.4	3679	
213	BROWNING-FERRIS INDUSTRIES	3547	158	3183	4	44.6	-82	1.4	8.1	3.5	3.9	3693	
214	UNION CAMP	3530	230	2967	4	124.8	-46	4.2	8.1	6.4	6.5	4612	
215	ILLINOIS TOOL WORKS	3489	219	2640	4	180.6	-1	6.8	7.2	13.7	14.9	2257	
216	NBD BANCORP	3463	249	2724	-3	293.0	1	10.8	10.2	18.2	14.7	29513	
217	ENRON	3429	238	13520	3	241.8	20	1.8	1.5	NA	12.8	9838	
218	LIZ CLAIBORNE	3428	172	2007	16	222.7	8	11.1	11.9	NA	25.3	1072	
219	DELTA AIR LINES	3422	210	10020	15	-239.5	NM	NM	NM	NM	-14.1	9083	
220	FLUOR	3404	161	6580	-10	152.1	11	2.3	1.9	14.5	14.9	2421	
221	FLEET/NORSTAR FINANCIAL GROUP	3376	336	4439	10	97.7	NM	2.2	NM	NM	3.9	45445	
222	DELUXE	3366	212	1474	4	182.9	6	12.4	12.2	21.7	24.5	1098	
223	ROHM & HAAS	3354	223	2763	-2	163.1	-21	5.9	7.3	9.7	12.4	2808	
224	REYNOLDS METALS	3353	179	5730	-5	154.1	-48	2.7	4.9	5.6	5.2	6685	
225	CONSOLIDATED RAIL	3351	335	3252	-4	-207.0	NM	NM	7.3	NM	-7.9	7096	
226	AVON PRODUCTS	3345	270	3593	4	210.7	8	5.9	5.7	NA	76.5	1729	
227	UNION ELECTRIC	3345	220	2097	4	321.5	9	15.3	14.5	10.1	14.3	5733	
228	WELLS FARGO	3341	159	5861	-2	21.0	-97	0.4	11.9	NA	0.1	53547	
229	BURLINGTON NORTHERN	3332	287	4559	-2	-306.0	NM	NM	4.8	NM	-25.5	6324	
230	U.S. HEALTHCARE	3309	338	1709y	28	151.1	95	8.8	5.8	43.6	45.8	758	
231	SALOMON	3305	211	9175y	3	507.0	67	5.5	3.4	21.9	13.8	96737	
232	AMERADA HESS	3253	166	6416y	-9	84.3	-83	1.3	6.8	4.9	2.7	8389	
233	TRANSAMERICA	3252	236	6815y	2	99.4	-63	1.5	4.0	5.0	3.1	33682	
234	GEICO	3241	245	2147y	11	196.4	-6	9.1	10.8	15.3	17.9	4086	
235	DOW JONES	3223	250	1725	0	72.2	-32	4.2	6.2	4.8	5.0	2471	
236	TEXTRON	3196	253	7840	-1	299.5	6	3.8	3.6	7.4	10.5	15740	
237	NORDSTROM	3192	237	3180	10	135.8	17	4.3	4.0	12.1	15.0	2042	
238	SCOTT PAPER	3189	206	4977	-7	-69.9	NM	NM	2.8	NM	-3.5	6493	
239	INGERSOLL-RAND	3183	244	3586	-4	150.6	-19	4.2	5.0	9.7	9.6	2980	
240	ALZA	3162	315	140	41	-62.1	NM	NM	24.8	NM	-18.7	580	



RATINGS	DIVIDENDS					SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
	12-MONTH HIGH LOW	P/E RATIO	YIELD %	PAYOFF %	TOTAL RETURN %	INST. HOLDING %	SHRS OUT MIL.	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	1992 EST \$	VAR. ATION %	
28/19	222	88	2.26	200	27	64	151	56.4	12	0.91	0.30	1.36	12.5	Consumer B
108/75	430	24	2.62	62	29	NA	38	46.0	12	4.11	4.41	NA	NM	Consumer D
57/40	138	NM	3.89	DEF	3	78	76	96.3	10	5.42	-0.27	1.85	18.9	Manufacturing C
52/42	226	19	1.99	38	17	67	78	34.0	12	2.91	2.64	3.11	3.9	Services D
35/23	192	11	3.67	40	-14	70	158	79.7	08	2.05	2.26	2.40	3.3	Health care C
85/55	NEG	NM	0.00	0	18	43	51	50.6	12	-4.33	-3.31	0.98	99.0	Telecomms. A
43/25	190	NM	3.28	DEF	19	43	106	69.7	12	6.79	-5.24	2.51	16.7	Banks D
45/29	197	17	3.27	56	58	67	89	85.1	12	2.36	2.51	2.81	3.6	Chemicals
34/24	163	NM	3.76	DEF	-9	60	130	84.7	01	2.45	-0.41	2.45	8.2	Retailing
49/38	341	18	2.96	53	18	61	76	39.4	12	2.68	2.72	2.93	2.0	Services B
45/37	278	17	2.38	40	8	26	90	29.9	12	2.39	2.43	2.65	1.9	Food B
63/38	441	23	0.54	13	50	81	71	63.5	12	2.01	2.23	3.11	10.3	Chemicals
53/43	161	12	6.41	77	20	27	76	21.2	12	3.95	4.01	4.19	1.4	Utilities A
48/27	313	32	2.12	69	43	59	85	41.0	12	0.54	1.31	0.73	16.4	Telecomms. B
41/23	623	26	2.64	67	53	70	107	52.0	04	1.31	1.31	1.73	2.3	Nonbank fin. A
162/117	193	NM	0.00	0	2	67	24	192.8	12	4.33	-14.31	8.25	37.2	Transportation A
44/35	216	19	6.76	128	18	8	96	7.6	12	3.21	1.96	2.38	12.2	Chemicals
31/17	310	55	2.94	162	-13	58	153	85.5	09	1.68	0.42	1.23	8.1	Services C
55/39	183	28	3.07	87	29	71	69	66.9	12	3.35	1.80	2.55	13.3	Paper B
71/52	288	19	1.40	27	17	70	55	31.2	12	3.35	3.25	3.70	3.0	Manufacturing A
32/23	174	12	3.35	40	21	45	116	34.5	12	2.50	2.49	2.68	3.4	Banks B
38/27	202	16	3.84	60	25	49	101	53.3	12	1.76	2.15	2.34	10.3	Utilities B
51/35	390	15	0.88	13	-12	73	86	109.8	12	2.37	2.61	2.93	3.1	Consumer A
79/57	187	NM	1.73	DEF	-7	65	49	141.7	06	5.79	-7.73	-2.96	68.9	Transportation A
54/35	334	23	0.95	22	-18	60	81	93.6	10	1.71	1.83	2.03	9.9	Services A
30/15	155	42	2.86	119	106	55	121	54.9	12	-0.75b	0.67	1.65	7.3	Banks A
49/34	450	18	3.19	59	8	58	84	39.5	12	2.03	2.18	2.41	2.5	Office equipment A
52/35	254	21	2.47	51	24	77	67	26.5	12	3.10	2.45	2.97	5.4	Chemicals
65/46	114	22	3.20	69	-6	75	60	93.3	12	5.01	2.60	2.70	35.6	Metals A
88/46	121	NM	2.21	DEF	75	85	41	136.0	12	5.10	-5.39	6.21	3.5	Transportation B
51/37	1330	16	3.00	48	27	66	72	140.7	12	2.81	2.92	3.40	1.2	Consumer D
39/29	155	11	6.84	74	18	38	102	44.4	12	2.74	3.01	2.93	3.8	Utilities A
99/53	119	NM	3.11	5000	4	63	52	147.6	12	13.39	0.04	6.16	21.8	Banks D
45/28	277	NM	3.15	DEF	48	65	87	95.7	12	2.89	-3.96	3.30	10.6	Transportation B
58/21	1003	22	0.95	21	92	70	71	381.9	12	1.08	2.09	2.49	4.4	Health care C
37/21	104	8	2.18	16	19	63	113	150.3	12	2.08	3.90	3.48	20.7	Nonbank fin. A
59/39	103	39	1.50	58	-14	57	81	68.1	12	5.96	1.04	1.95	34.9	Fuel B
43/31	116	37	4.75	175	21	60	77	45.3	12	3.29	1.14	3.68	5.7	Nonbank fin. A
228/168	295	17	1.00	17	24	81	14	7.6	12	13.64	13.48	13.61	3.8	Nonbank fin. B
35/22	222	45	2.38	107	28	37	101	24.7	12	1.06	0.71	1.32	9.1	Publishing/TV B
40/29	113	11	3.02	33	27	63	86	46.5	12	3.18	3.42	3.87	3.1	Conglomerates
53/31	353	24	0.82	19	15	38	82	148.5	01	1.42	1.66	2.03	6.4	Retailing
46/30	161	NM	1.85	DEF	-5	72	74	67.8	12	2.01	-0.95	2.62	11.5	Paper B
66/42	203	21	2.15	45	21	61	52	64.1	12	3.55	2.91	3.55	4.8	Manufacturing C
55/28	953	NM	0.00	0	41	66	72	90.6	12	0.35	-0.88	0.88	11.4	Health care B



	COMPANY	MARKET VALUE		SALES	CHANGE FROM 1990	PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS 1991 \$ MIL.	1990 %	12 MONTHS 1991 \$ MIL.	1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %
241	DURACELL INTERNATIONAL	3153	NR	1589	10	113.6	474	7.1	1.4	12.5	11.6	2282	1
242	UNION CARBIDE	3142	264	4877	-7	116.0	NM	NM	3.6	NM	-6.0	5138	-11
243	GENENTECH	3130	371	460y	6	44.3	NM	9.6	NM	4.4	4.7	1231	6
244	ALLTEL	3085	216	1748	11	189.0	-2	10.8	12.3	11.8	17.5	2788	6
245	FREEPORT-MCMORAN	3081	298	1579	0	96.7	-69	6.1	19.8	11.6	NA	3565	15
246	CHASE MANHATTAN	3077	327	11840	-13	520.0	NM	4.4	NM	17.4	11.6	98197	0
247	KNIGHT-RIDDER	3076	266	2237	-3	132.1	-11	5.9	6.5	9.9	11.8	2358	7
248	WINN-DIXIE STORES	3075	229	10203	2	177.9	12	1.7	1.6	20.0	20.3	1847	8
249	TORCHMARK	3008	227	1932	8	246.5	8	12.8	12.8	16.0	23.1	6160	11
250	CONSOLIDATED NATURAL GAS	2993	180	2607	-4	168.6	3	6.5	6.0	8.8	9.2	4642	1
251	REEBOK INTERNATIONAL	2991	239	2734	27	234.7	33	8.6	8.2	23.7	30.6	1431	2
252	SUN MICROSYSTEMS	2987	205	3455	25	199.3	32	5.8	5.5	13.1	15.0	2341	7
253	MORTON INTERNATIONAL	2971	284	1967	9	143.4	3	7.3	7.7	11.6	12.3	2007	6
254	HALLIBURTON	2969	113	7019y	1	26.6	-87	0.4	2.8	1.6	1.2	5041	13
255	WHIRLPOOL	2967	340	6770	2	170.0	136	2.5	1.1	NA	11.4	6162	7
256	ST. PAUL	2966	233	4369	8	405.1	4	9.3	9.7	14.2	17.6	12982	6
257	SUN	2958	186	11930x	-9	-132.0	NM	NM	1.7	NM	-4.9	7143	-10
258	BAUSCH & LOMB	2950	286	1520	11	85.9	-35	5.7	9.6	11.3	9.9	1392	4
259	ETHYL	2943	194	2575	2	206.7	-11	8.0	9.2	12.2	16.9	7905	18
260	SAFECO	2941	269	3172y	0	259.6	-7	8.2	8.7	10.3	11.7	11907	13
261	FEDERAL EXPRESS	2931	302	7548	0	-30.9	NM	NM	1.7	NM	-1.8	5806	-6
262	TEMPLE-INLAND	2904	317	2507	4	138.4	-40	5.5	9.7	6.6	9.1	10068	29
263	UNOCAL EXPLORATION	2892	246	878y	-4	146.8	-10	16.7	17.8	NA	19.3	1955	-3
264	NEWMONT MINING	2881	248	623	-9	94.3	-44	15.1	24.7	32.4	62.1	818	-14
265	OHIO EDISON	2861	242	2359	5	272.5	-7	11.6	13.0	7.7	10.1	7812	0
266	ROADWAY SERVICES	2851	361	3177	7	127.3	7	4.0	4.0	14.3	14.3	1489	11
267	MCGRAW-HILL	2838	224	1943	0	148.0	-14	7.6	8.9	12.3	NA	2525	0
268	TEXAS INSTRUMENTS	2834	187	6784	3	-409.0	NM	NM	NM	NM	-27.9	5009	-1
269	WM. WRIGLEY JR.	2828	281	1149	3	128.7	10	11.2	10.6	27.9	27.8	625	11
270	NEWELL	2821	362	1119	4	112.2	11	10.0	9.5	15.2	19.2	1076	23
271	LOCKHEED	2819	256	9809	-2	308.0	-8	3.1	3.4	9.9	12.3	6617	-4
272	TRIBUNE	2815	235	2035	-14	142.0	NM	7.0	NM	NA	25.8	2795	-1
273	W. W. GRAINGER	2804	307	2077	7	127.7	1	6.2	6.6	14.8	14.8	1217	5
274	WASHINGTON POST	2803	226	1380	-4	118.7	-32	8.6	12.1	12.5	12.7	1512	4
275	GENERAL PUBLIC UTILITIES	2798	261	3372	9	311.8	-1	9.2	10.1	9.2	11.8	7470	8
276	PHELPS DODGE	2798	279	2434	-8	272.9	40	11.2	17.3	13.1	14.7	3051	8
277	HILLENBRAND INDUSTRIES	2788	387	1199	8	89.2	18	7.4	6.8	16.4	18.2	1532	21
278	WHEELABRATOR TECHNOLOGIES	2777	309	1173	2	126.0	166	10.7	4.1	8.9	15.9	2664	17
279	DRESSER INDUSTRIES	2763	193	4607	-2	135.9	-19	3.0	3.6	8.3	7.6	3191	2
280	NORTHEAST UTILITIES	2758	289	2754	5	279.3	9	10.1	9.8	7.7	12.6	6782	3
281	FIFTH THIRD BANCORP	2721	393	885	6	138.2	15	15.6	14.4	NA	15.7	8826	11
282	AON	2707	274	2893	10	242.0	1	8.4	9.1	13.1	15.4	11061	7
283	STORAGE TECHNOLOGY	2706	539	1585	3	93.1	-1	5.9	6.1	13.6	12.8	1700	17
284	BANK OF NEW YORK	2701	329	4225	-21	122.0	-60	2.9	5.8	5.6	3.6	39410	-13
285	ORACLE SYSTEMS	2697	486	1085	6	33.6	-8	3.1	3.5	8.4	9.0	759	11



RATINGS	DIVIDENDS					SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
	12 MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST \$	VARI- ATION %
36/19	323	57	0.00	0	NA	31	112	NA	06	NR	0.50	1.42	2.8	Manufacturing A
25/16	140	NM	4.06	DEF	36	50	128	95.3	12	2.19	-1.06	1.46	27.4	Chemicals
36/24	330	72	0.00	0	1	19	111	35.6	12	-1.05	0.39	0.26	100.0	Health care B
43/35	288	15	4.17	63	6	30	87	21.7	12	2.35	2.34	2.58	3.9	Telecomms. B
45/31	531	31	5.90	182	28	53	73	60.0	12	5.22	1.37	1.63	22.1	Chemicals
25/14	74	7	5.45	38	80	53	140	130.3	12	-3.31	3.12	2.96	13.2	Banks A
60/44	275	23	2.43	55	19	70	54	49.2	12	2.94	2.55	2.96	3.7	Publishing/TV B
45/34	351	18	2.99	55	13	18	77	13.6	06	1.93	2.20	2.40	1.7	Food C
62/47	288	13	2.70	34	7	51	51	29.2	12	4.28	4.70	5.16	2.3	Nonbank fin. B
45/34	164	18	5.53	98	-13	40	87	27.8	12	1.91	1.94	2.45	9.0	Utilities B
36/20	389	14	0.91	13	67	59	91	127.5	12	1.54	2.37	2.77	5.4	Consumer A
39/21	225	17	0.00	0	7	71	96	410.4	06	1.21	1.85	2.01	6.5	Office equipment B
65/44	255	22	1.56	34	45	67	48	62.2	06	2.80	2.85	3.03	2.0	Chemicals
55/26	133	NM	3.60	400	-47	63	107	120.2	12	1.85	0.25	1.38	14.5	Fuel C
47/26	198	17	2.58	45	77	78	70	74.8	12	1.04	2.45	2.98	5.7	Consumer B
76/57	132	7	3.73	28	13	84	43	82.8	12	8.57	9.35	8.03	3.6	Nonbank fin. B
36/26	110	NM	6.46	DEF	-8	54	106	29.8	12	1.86	-1.25	2.01	18.4	Fuel B
61/38	341	35	1.45	51	35	73	59	63.7	12	2.19	1.42	2.91	2.8	Health care D
33/22	241	14	2.41	34	-11	38	118	44.5	12	1.95	1.75	1.95	3.6	Chemicals
50/36	132	11	3.16	36	32	65	63	73.8	12	4.41	4.14	4.14	5.3	Nonbank fin. B
55/31	170	32	0.00	0	24	72	54	85.2	05	0.11	1.69d	3.22	31.7	Transportation C
58/35	191	21	1.82	38	41	71	55	58.2	12	4.20	2.51	3.71	5.9	Containers B
12/9	381	20	3.48	69	10	NA	251	1.9	12	0.65	0.58	0.58	48.3	Fuel B
47/33	1897	31	1.41	43	24	31	68	46.3	12	2.49	1.39	1.54	17.5	Metals C
21/17	121	12	8.00	94	13	30	153	39.0	12	1.67	1.60	1.75	6.3	Utilities A
77/44	320	22	1.65	37	54	63	39	95.6	12	3.05	3.27	3.74	5.3	Transportation D
65/50	297	19	3.87	74	8	65	49	48.0	12	3.53	3.03	↑	↑	Publishing/TV B
48/26	178	NM	2.09	DEF	-8	65	82	118.4	12	-0.92	-5.40	1.99	58.3	Electrical D
86/58	610	22	2.28	50	23	26	39	18.7	12	2.99	3.28	3.61	0.8	Food B
53/28	485	25	1.32	33	70	60	62	54.7	12	1.67	1.81	2.11	1.4	Manufacturing A
48/38	113	9	4.42	41	15	63	62	112.3	12	5.30	4.86	5.61	2.1	Aerospace
48/35	580	22	2.20	49	10	43	65	40.1	12	-1.22	1.94	2.30	7.8	Publishing/TV B
57/36	326	22	1.17	26	41	62	53	45.8	12	2.31	2.37	2.70	3.3	Services B
251/169	300	24	1.78	42	5	55	12	22.0	12	14.45	10.00	10.99	7.4	Publishing/TV B
27/22	120	10	5.94	60	17	66	111	53.4	12	2.51	2.49	2.50	4.4	Utilities A
85/58	150	10	3.73	38	31	72	35	141.3	12	13.12	7.86	7.39	26.8	Metals C
39/21	568	31	0.91	29	86	19	73	15.3	11	1.03	1.23	1.44	3.5	Manufacturing A
37/23	349	21	0.00	0	39	33	91	27.5	12	0.60	1.46	1.36	2.2	Utilities A
28/16	155	20	2.93	58	-20	65	135	84.2	10	1.29	1.04	1.23	10.6	Fuel C
25/20	147	11	7.61	83	26	27	119	35.9	12	1.94	2.12	2.02	4.5	Utilities A
76/39	309	20	1.75	34	86	35	40	36.8	12	3.07	3.50	3.96	2.0	Banks B
45/34	172	12	3.73	43	28	56	63	23.0	12	3.61	3.71	4.02	2.2	Nonbank fin. B
78/28	371	29	0.00	0	161	82	41	211.0	12	2.22	2.33	3.33	3.6	Office equipment B
41/25	108	NA	3.94	NA	56	67	70	84.1	12	3.98b	NA ^d	3.67	6.8	Banks A
21/7	721	41	0.00	0	122	34	138	229.8	05	-0.09	0.47d	0.75	17.3	Office equipment C



	COMPANY	MARKET VALUE		SALES	CHANGE FROM 1990 %	PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS 1991 \$ MIL.		12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL.	CHANG FROM 1990 %
286	COMPUTER ASSOCIATES INTERNATIONAL	2680	366	1438	10	173.0	7	12.0	12.4	14.1	14.6	2308	45
287	BAKER HUGHES	2669	173	2747	1	161.7	6	5.9	5.6	10.8	10.4	2895	0
288	TRW	2666	265	7913	-3	-140.0	NM	NM	2.5	NA	-7.3	5635	1
289	CAPITAL HOLDING	2654	323	2671	4	250.2	51	9.4	6.4	14.2	15.2	18900	13
290	POTOMAC ELECTRIC POWER	2653	294	1552	10	210.2	23	13.5	12.1	7.0	11.5	5854	12
291	MARTIN MARIETTA	2646	277	6075	-1	313.1	-4	5.2	5.3	14.9	17.4	3897	8
292	TAMBRANDS	2629	273	661	5	79.0	-19	12.0	15.5	31.2	31.5	382	-1
293	CROWN CORK & SEAL	2620	351	3807y	24	128.1	20	3.4	3.5	10.8	12.4	2906	3
294	UNITED HEALTHCARE	2620	613	847	40	74.8	121	8.8	5.6	23.5	23.5	574	96
295	BALTIMORE GAS & ELECTRIC	2608	285	2460	12	233.7	33	9.5	8.0	7.7	8.9	7079	6
296	LONG ISLAND LIGHTING	2575	271	2549	4	305.5	-4	12.0	13.1	8.1	11.2	9543	8
297	NATIONAL MEDICAL ENTERPRISES	2573	189	3973	6	292.3	13	7.4	6.9	12.4	16.4	4095	5
298	GERBER PRODUCTS	2570	306	1209	3	106.4	-6	8.8	9.6	20.6	24.2	838	5
299	BECTON, DICKINSON	2565	240	2191	6	182.1	-1	8.3	8.9	10.5	13.3	2860	9
300	IMCERA GROUP	2564	322	1664	8	114.6	45	6.9	5.1	9.5	9.9	2015	-10
301	CLOROX	2547	304	1679	8	62.2	-56	3.7	9.0	7.6	7.6	1484	-4
302	CENTERIOR ENERGY	2540	259	2560	5	297.9	-9	11.6	13.4	7.0	8.3	12042	1
303	GENERAL DYNAMICS	2520	559	8751	-7	374.0	NM	4.3	NM	NA	20.5	6207	6
304	AUTOZONE	2519	NR	868	25	49.2	82	5.7	3.9	22.5	21.8	418	20
305	NORTHERN STATES POWER	2517	310	2201	7	207.1	7	9.4	9.3	8.9	12.0	4787	1
306	COMPAQ COMPUTER	2511	103	3271	-9	130.9	-71	4.0	12.6	8.2	7.0	2750	9
307	MCDONNELL DOUGLAS	2505	396	18488y	16	355.0	32	1.9	1.7	7.7	9.2	14841	-1
308	FRUIT OF THE LOOM	2504	625	1514a	5	82.7	-11	5.5	6.4	NA	12.9	2131	-1
309	NATIONAL CITY	2482	292	2588	-4	231.0	-1	8.9	8.7	14.0	12.7	24170	2
310	NATIONAL HEALTH LABORATORIES	2480	427	604	20	103.9	26	17.2	16.5	31.4	31.4	411	10
311	GOLDEN WEST FINANCIAL	2476	337	2241	5	238.6	32	10.6	8.5	7.1	16.5	24298	8
312	SHERWIN-WILLIAMS	2476	330	2541	12	128.2	5	5.0	5.4	14.4	15.1	1612	7
313	WISCONSIN ENERGY	2475	303	1539	7	195.2	1	12.7	13.4	9.7	13.1	3496	4
314	PRICE	2469	313	7056y	22	137.4	7	1.9	2.2	11.6	16.8	2089	39
315	CIRCUS CIRCUS ENTERPRISES	2462	355	806	16	103.3	35	12.8	11.0	20.5	33.8	788	-1
316	BIOMET	2458	389	244	35	45.2	30	18.5	19.2	22.6	22.6	242	36
317	CHAMPION INTERNATIONAL	2451	267	4786	-6	40.3	-82	0.8	4.4	2.1	0.3	8588	5
318	UNUM	2450	331	2421	12	205.0	11	8.5	8.5	32.4	14.9	10668	12
319	AMERICAN STORES	2441	247	20823	-6	240.2	32	1.2	0.8	9.0	16.0	7073	-3
320	NIAGARA MOHAWK POWER	2433	334	3383	7	243.4	194	7.2	2.6	7.5	9.6	8241	6
321	EATON	2432	324	3381	-7	62.0	-63	1.8	4.6	6.2	5.4	3087	2
322	NALCO CHEMICAL	2421	305	1237	16	134.6	6	10.9	11.9	16.4	25.0	1324	28
323	CORESTATES FINANCIAL	2418	346	2495a	-4	94.7	53	3.8	2.4	10.6	15.3	22849	-2
324	VF	2409	409	2952	13	161.3	99	5.5	3.1	13.4	19.1	2127	15
325	SAN DIEGO GAS & ELECTRIC	2408	278	1789	1	208.1	0	11.6	11.7	NA	14.5	3748	2
326	TYSON FOODS	2405	257	3978	4	148.5	18	3.7	3.3	11.9	17.4	2598	2
327	HERCULES	2376	332	2929	-8	94.9	-1	3.2	3.0	5.8	5.0	3467	-6
328	AFLAC	2360	358	3283	23	148.7	27	4.5	4.4	14.7	16.1	10145	26
329	PALL	2359	353	669	10	81.2	15	12.1	11.5	16.1	16.3	780	4
330	COASTAL	2359	203	9549	-1	96.3	-57	1.0	2.3	NA	4.7	9288	9



RATINGS	DIVIDENDS					SHARES					EARNINGS PER SHARE				INDUSTRY GROUP
	12 MONTH HIGH LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INST. TUTIONS HOLDING %	SHRS OUT ML.	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST. \$	VAR. ATION %	
	17/7	227	15	0.66	10	81	47	177	101.5	03	0.86	1.03d	1.19	7.6	Office equipment C
	30/18	171	15	2.39	37	-35	72	139	100.3	09	1.06	1.26	1.18	10.2	Fuel C
	46/35	139	NM	4.09	DEF	17	55	61	39.0	12	3.39	-2.30	3.05	10.2	Conglomerates
	64/42	169	11	2.31	25	31	67	46	57.5	12	3.39	5.33	6.34	2.7	Nonbank fin. B
	25/20	155	13	6.70	86	19	21	111	41.8	12	1.62	1.87	1.95	4.6	Utilities A
	60/46	147	8	2.82	24	18	65	50	69.6	12	6.52	6.30	7.52	2.0	Aerospace
	71/50	1047	33	2.13	71	27	75	41	67.4	12	2.30	1.92	3.11	1.6	Consumer D
	93/61	253	20	0.00	0	41	40	29	49.4	12	3.71	4.43	5.08	5.3	Containers A
	93/30	822	32	0.04	1	166	75	34	285.0	12	1.29	2.40	3.11	3.2	Health care C
	35/28	121	14	6.80	92	20	42	84	39.3	12	1.64	2.28	2.67	6.0	Utilities A
	25/22	121	11	7.35	79	9	49	111	62.8	12	2.26	2.15	2.35	5.1	Utilities A
	26/13	144	10	3.04	31	-31	66	170	117.3	05	1.54b	1.48d	1.69	8.9	Health care C
	79/55	586	18	2.09	38	22	55	37	55.6	03	3.00	3.80d	4.31	1.4	Food B
	82/58	189	14	1.77	25	-3	68	38	95.8	09	4.67	4.86	5.15	2.7	Health care D
	47/28	221	25	1.19	29	28	79	76	94.2	06	0.84	1.37	1.65	1.8	Health care D
	49/37	310	48	3.33	159	24	48	54	53.8	06	2.80	0.98	2.87	1.7	Consumer D
	20/15	89	11	8.83	94	7	26	140	34.3	12	1.90	1.71	1.78	6.7	Utilities A
	62/24	138	7	1.66	11	140	44	42	104.8	12	-15.34	8.93	6.77	6.1	Aerospace
	42/13	1119	56	0.00	0	NA	16	69	NA	08	0.39	0.66	0.86	1.2	Retailing
	44/33	160	13	6.01	80	26	33	63	34.6	12	2.79	3.02	3.09	4.2	Utilities A
	73/22	134	20	0.00	0	-57	45	85	334.1	12	5.14	1.49	2.74	13.1	Office equipment B
	81/36	65	7	2.15	15	60	40	38	103.6	12	7.18	9.25	9.82	10.0	Aerospace
	36/12	390	NA	0.00	0	159	75	75	102.4	12	1.18b	NA d	2.01	4.5	Consumer A
	42/32	144	11	4.60	52	25	69	61	47.8	12	3.86b	3.60	3.91	4.3	Banks B
	31/13	750	24	1.08	26	71	50	99	83.5	12	0.83	1.05	1.26	4.0	Health care C
	44/26	171	10	0.56	6	37	63	64	58.5	12	2.87	3.76	4.17	2.2	Nonbank fin. C
	30/21	291	19	1.56	30	30	63	88	51.3	12	1.41	1.45	1.67	3.0	Housing A
	40/31	171	13	5.06	66	22	35	67	37.9	12	2.77	2.81	2.99	3.3	Utilities A
	65/41	301	19	0.00	0	31	66	49	225.7	08	2.47	2.68	2.78	4.0	Retailing
	47/30	805	24	0.00	0	46	75	57	126.1	01	1.39	1.84	2.22	2.7	Leisure C
	32/13	1228	47	0.00	0	70	53	113	149.1	05	0.36	0.46d	0.58	5.2	Health care D
	30/22	67	NM	0.76	143	-3	70	93	69.4	12	2.08b	0.14	0.56	82.1	Paper B
	41/28	179	12	1.42	17	30	67	67	61.1	12	2.69	3.08	6.45	2.3	Nonbank fin. B
	46/26	162	10	1.99	20	3	80	69	63.0	01	2.64	3.47	3.23	3.1	Food C
	19/14	115	12	3.58	43	30	53	136	61.1	12	0.30	1.49	1.65	3.0	Utilities A
	75/53	211	39	3.08	120	30	68	34	52.4	12	4.77	1.84	4.22	9.5	Automotive B
	42/27	486	20	2.42	47	20	63	70	61.8	12	1.71	1.78	1.97	4.6	Chemicals
	50/33	163	11	4.51	48	40	59	55	118.7	12	2.06	4.19	4.42	4.3	Banks A
	45/24	292	15	2.59	39	67	79	58	53.3	12	1.35	2.75	3.02	4.6	Consumer A
	46/37	177	12	6.53	79	10	16	56	35.6	12	3.52	3.53	3.53	2.6	Utilities A
	23/17	282	17	0.23	4	-3	12	137	54.4	09	0.91	1.05	1.15	1.7	Food B
	51/33	126	25	4.40	111	28	78	47	81.0	12	2.04	2.01	3.43	4.4	Chemicals
	33/20	256	16	1.39	22	29	45	82	40.7	12	1.44	1.82	2.12	2.4	Nonbank fin. B
	32/20	472	29	1.34	39	40	65	88	56.5	07	0.76	0.92	1.09	2.8	Conglomerates
	37/23	116	25	1.76	43	-24	69	104	78.5	12	2.15	0.92	2.20	11.8	Fuel B

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RANK	COMPANY	MARKET VALUE		SALES	CHANGE FROM 1990	PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS 1991 \$ MIL.	1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %
331	GREAT WESTERN FINANCIAL	2352	300	3953y	-6	298.1	135	7.5	3.0	7.4	14.2	39600	1
332	DOVER	2352	263	2196	-1	128.2	-18	5.8	7.0	17.1	15.5	1357	-8
333	ALLEGHENY POWER SYSTEM	2339	320	2282	-1	212.6	1	9.3	9.1	NA	11.6	4855	6
334	LOUISIANA-PACIFIC	2337	497	1702	-5	55.9	-39	3.3	5.1	4.5	4.6	2107	0
335	FLORIDA PROGRESS	2336	318	2075	3	191.3	-3	9.2	9.8	9.7	11.0	5025	0
336	LINCOLN NATIONAL	2334	297	9169	8	208.4	9	2.3	2.3	9.0	8.2	34000	23
337	TANDY	2321	254	4515y	-2	176.2	-32	3.9	5.6	9.6	9.4	3291	-6
338	STATE STREET BOSTON	2317	391	1358	3	139.3	19	10.3	8.9	NA	17.1	15046	29
339	BARNETT BANKS	2311	400	3274	0	123.8	85	3.8	2.0	NA	6.5	32721	2
340	WESTVACO	2295	347	2268	-5	147.9	-7	6.5	6.6	7.2	8.6	3459	5
341	FIRST FIDELITY BANCORPORATION	2286	438	2778	-10	221.2	NM	8.0	NM	11.6	11.9	30215	4
342	NEW YORK TIMES	2263	367	1703	-4	47.0	-28	2.8	3.7	4.9	NA	2128	-1
343	CISCO SYSTEMS	2250	648	244	110	58.8	120	24.1	23.0	39.6	39.6	187	89
344	CBS	2247	276	3035	-7	-98.7	NM	NM	2.8	NM	-31.3	2816	-44
345	LUBRIZOL	2218	352	1476	2	123.7	-35	8.4	13.1	15.5	15.6	1172	5
346	BLOCKBUSTER ENTERTAINMENT	2215	314	868	37	93.7	36	10.8	10.9	17.1	21.3	804	32
347	SIGMA-ALDRICH	2201	348	589	11	79.8	12	13.5	13.5	NA	19.2	568	8
348	PET	2190	NR	1878	-1	99.6	NM	5.3	NM	11.0	18.7	1532	0
349	KEYCORP	2176	482	2283	27	188.1	27	8.2	8.2	14.9	14.1	23156	20
350	CHAMBERS DEVELOPMENT	2155	445	322	25	49.9	45	15.5	13.3	8.1	8.9	1109	42
351	IVAX	2148	800	159a	34	8.8	NM	5.5	NM	7.4	6.3	447	283
352	MCCORMICK	2141	436	1428	8	80.9	17	5.7	5.2	16.6	20.8	1032	9
353	TECO ENERGY	2134	354	1154	5	148.9	4	12.9	13.0	10.7	16.3	2834	13
354	HOUSEHOLD INTERNATIONAL	2118	374	4594	6	149.8	-36	3.3	5.4	NA	7.7	29982	2
355	COOPER TIRE & RUBBER	2116	584	1001	12	79.4	20	7.9	7.4	16.7	18.1	671	9
356	MEAD	2115	369	4579	-4	75.6	-29	1.7	2.2	5.0	4.9	3986	3
357	REPUBLIC NEW YORK	2108	342	2535	-9	227.4	13	9.0	7.3	11.3	13.3	31221	5
358	STANLEY WORKS	2104	415	1962	-1	95.1	-11	4.8	5.4	10.8	13.5	1548	4
359	HASBRO	2097	443	2141	41	81.7	-8	3.8	5.9	7.6	9.2	1950	52
360	TRAVELERS	2083	283	11377	1	307.4	NM	2.7	NM	5.5	6.6	52709	-7
361	CINCINNATI GAS & ELECTRIC	2082	388	1518	6	207.0	-12	13.6	16.3	9.5	11.5	4584	10
362	SANTA FE PACIFIC	2081	439	2360	3	96.4	NM	4.1	NM	9.2	9.3	5221	3
363	HILTON HOTELS	2078	301	1113y	-1	84.3	-25	7.6	10.0	7.1	9.0	2187	14
364	U.S. BANCORP	2074	382	2014	0	196.4	3	9.8	9.5	NA	13.9	18875	2
365	BROWN-FORMAN	2063	319	1203	9	141.9	-1	11.8	13.0	18.4	20.5	1223	15
366	INTERPUBLIC GROUP	2054	403	1678y	23	94.6	18	5.6	5.9	16.6	18.8	2336	24
367	ST. JUDE MEDICAL	2054	282	210	20	84.0	30	40.0	36.9	26.2	26.2	375	35
368	COMCAST	2043	378	709a	11	-161.2	NM	NM	NM	NA	NM	2687	9
369	CITIZENS UTILITIES	2027	458	525a	8	111.0	5	21.1	21.7	11.9	16.2	1610	29
370	H.F. AHMANSON	2020	328	4592y	-4	245.8	29	5.4	4.0	9.6	9.3	47276	-8
371	DOLE FOOD	2019	321	3216	7	133.7	11	4.2	4.0	11.4	13.1	2565	8
372	FIRST BANK SYSTEM	2019	432	1821	-15	190.4	46	10.5	6.1	13.7	14.5	18301	-4
373	PIONEER HI-BRED INTERNATIONAL	2017	408	1131	17	108.4	62	9.6	6.9	17.0	16.8	1289	4
374	MATTEL	2001	500	1622	10	118.1	29	7.3	6.2	24.3	26.9	1061	14
375	MELLON BANK	1995	506	3151	9	280.0	61	8.9	5.0	NA	14.0	29355	2



RATINGS	DIVIDENDS				SHARES				EARNINGS PER SHARE				INDUSTRY GROUP	
	12 MONTH HIGH: LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INST. TITUTIONS HOLDING %	SHRS OUT. MIL.	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$		ANALYSTS' ESTIMATES 1992 EST. \$ VARIATION %
21/14	115	8	4.82	39	21	86	129	69.6	12	0.99	2.25	2.36	3.4	Nonbank fin. C
44/35	285	19	2.11	39	-5	61	59	36.6	12	2.55	2.15	2.46	3.7	Manufacturing C
47/37	140	12	7.42	89	19	38	54	43.3	12	3.61	3.61	3.74	1.6	Utilities A
62/30	194	39	1.80	70	78	46	39	97.3	12	2.46	1.55	3.44	16.0	Paper A
48/39	147	13	6.72	88	18	35	55	36.1	12	3.50	3.24	3.46	4.3	Utilities A
61/45	99	12	5.20	63	20	63	42	37.9	12	4.29	4.60	4.67	10.5	Nonbank fin. B
37/23	127	12	1.99	23	1	60	77	82.9	06	3.54	2.58	2.75	9.5	Office equipment B
66/40	284	17	1.35	23	57	70	37	141.0	12	3.10b	3.62	3.92	5.1	Banks A
38/21	131	19	3.97	77	56	59	70	80.0	12	1.06	1.71	2.50	12.0	Banks C
41/28	134	17	3.17	52	31	53	66	32.1	10	2.90	2.10	2.48	10.5	Paper B
36/23	133	10	3.69	36	53	38	70	41.1	12	-0.33	3.37	3.42	5.0	Banks A
29/18	214	47	1.94	92	30	47	78	37.4	12	0.85	0.61	0.80	16.3	Publishing/TV B
87/21	1517	57	0.00	0	191	86	29	589.3	07	0.50	1.38	2.33	4.7	Office equipment C
188/128	632	NM	0.59	DEF	1	78	13	95.8	12	3.55	-6.11	9.10	14.7	Publishing/TV A
66/43	279	18	2.49	45	23	67	35	97.8	12	5.34	3.57	3.98	4.0	Chemicals
15/8	504	23	0.00	0	-2	40	172	165.7	12	0.43	0.56	0.74	4.1	Leisure B
54/34	530	28	0.57	16	27	55	50	51.5	12	1.44	1.60	1.85	1.6	Health care B
24/15	411	28	1.18	33	NA	59	107	NA	06	NR	0.72d	1.04	1.9	Food B
51/27	172	12	3.14	37	76	50	47	43.7	12	3.47	3.86	4.47	2.2	Banks A
37/22	384	39	0.00	0	49	52	67	33.2	12	0.63	0.83	1.06	2.8	Services C
41/8	1532	NM	0.00	0	308	14	63	84.2	12	-0.01	0.21d	0.64	31.3	Health care B
29/17	550	27	1.34	37	55	46	80	77.5	11	0.83	0.98	1.14	1.8	Food B
42/32	239	15	4.60	67	20	37	57	31.1	12	2.45	2.55	2.68	3.0	Utilities A
63/41	134	17	4.24	73	21	66	40	83.1	12	5.75b	3.10	6.13	6.4	Conglomerates
53/21	481	27	0.55	15	132	70	41	63.0	12	1.61	1.92	2.23	3.6	Automotive C
39/28	138	28	2.76	78	27	62	58	58.2	12	1.71	1.29	1.87	13.4	Paper B
48/36	137	10	2.47	25	15	55	52	31.1	12	3.63	3.95	4.25	1.4	Banks A
48/34	298	20	2.67	54	40	48	45	36.2	12	2.53	2.31	2.76	5.4	Manufacturing B
42/23	236	26	0.66	17	60	70	57	77.3	12	1.54	1.41	2.64	8.0	Leisure D
25/17	47	7	8.00	56	8	67	104	68.6	12	-1.85	2.87	2.60	15.0	Nonbank fin. B
40/31	131	11	6.73	75	28	40	56	44.1	12	4.12	3.32	3.60	5.6	Utilities A
14/7	201	22	0.86	19	53	38	179	66.9	12	-0.62	0.54	0.85	10.6	Transportation B
50/34	222	25	2.74	68	3	26	48	80.9	12	2.34	1.76	2.27	5.3	Leisure C
24/17	147	11	3.60	38	33	55	98	115.8	12	2.04	2.01	2.30	5.2	Banks D
90/69	299	14	3.26	45	5	41	28	18.3	04	5.21	5.44d	6.09	10.8	Consumer C
59/41	408	21	1.51	32	38	81	37	45.1	12	2.38	2.60	3.01	2.0	Services D
56/40	640	25	0.00	0	4	63	47	237.7	12	1.35	1.75	2.18	2.3	Health care D
19/13	3613	NM	0.88	DEF	14	23	129	42.6	12	-1.58	-1.29d	-1.32	22.7	Publishing/TV A
40/24	296	17	0.00	0	41	8	55	16.6	12	1.91	2.10d	2.25	0.0	Utilities A
21/13	76	8	5.06	43	13	90	116	58.3	12	1.64	2.06	2.22	3.2	Nonbank fin. C
48/32	198	15	1.18	18	7	49	59	79.0	12	2.03	2.24	2.75	6.5	Food B
28/17	175	12	3.18	39	59	49	78	56.7	12	1.53b	2.13	2.40	10.4	Banks B
75/45	313	19	1.74	34	39	56	30	62.2	08	2.33	3.44	3.78	4.2	Food B
35/18	457	17	0.64	11	75	NA	64	117.2	12	1.44	1.85	NA	NM	Leisure D
42/24	121	8	3.59	30	57	54	51	74.9	12	2.83	4.66	4.63	10.6	Banks A



RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %
376	DIAL	1990	489	3569	1	122.4	5	3.4	3.3	8.3	11.1	5401	4
377	FIRST CHICAGO	1970	392	4830	-15	116.3	-53	2.4	4.4	NA	3.3	48963	-2
378	MAYTAG	1967	410	2971	-3	79.0	-20	2.7	3.2	7.1	7.8	2535	-5
379	BEAR STEARNS	1965	433	2527y	6	232.5	126	9.2	4.3	44.3	23.1	54670	50
380	MBIA	1963	420	269	20	144.7	14	53.8	56.6	12.6	13.6	2278	13
381	STONE CONTAINER	1962	596	5384	-6	-49.1	NM	NM	1.7	NM	-3.5	6903	5
382	WILLAMETTE INDUSTRIES	1962	459	2005	5	45.8	-65	2.3	6.8	4.9	4.6	2219	13
383	NUCOR	1959	373	1465	-1	64.7	-14	4.4	5.1	7.8	9.4	1132	7
384	SUPER VALU STORES	1952	326	10744	3	207.3	37	1.9	1.5	15.1	18.9	2581	1
385	CONTEL CELLULAR	1949	291	235	41	-118.9	NM	NM	NM	NM	NM	1814	13
386	AMDAHL	1929	368	1702	-21	4.4	-98	0.3	8.5	NA	0.3	2336	0
387	NEW ENGLAND ELECTRIC SYSTEM	1925	380	2094	10	190.4	-30	9.1	14.3	8.6	12.6	4450	1
388	CINCINNATI FINANCIAL	1909	383	1138a	11	147.7	18	13.0	12.2	11.5	11.0	3436	33
389	LITTON INDUSTRIES	1902	364	5463	6	68.4	-60	1.3	3.3	5.9	5.6	5090	-5
390	FRANKLIN RESOURCES	1900	441	334y	15	104.0	15	31.1	31.1	28.3	26.9	627	24
391	PACCAR	1885	440	2339	-16	39.7	-38	1.7	2.3	NA	3.8	2738	-6
392	SOUTHERN NEW ENGLAND TELECOMMS.	1879	293	1633y	1	125.9	-5	7.7	8.2	8.6	10.8	3539	3
393	MBNA	1863	NR	1134	31	149.2	16	13.2	14.9	NA	26.0	6009	31
394	E. W. SCRIPPS	1854	406	1300	0	64.6	35	5.0	3.7	9.1	9.8	1700	12
395	ASHLAND OIL	1849	341	9201	-1	185.2	24	2.0	1.6	9.8	12.7	5356	7
396	PENNZOIL	1846	228	2685y	-2	-42.0	NM	NM	2.9	NA	-3.4	5231	-2
397	SOCIETY	1841	466	1609	-6	163.0	5	10.1	9.1	19.9	14.9	15405	2
398	JEFFERSON-PILOT	1838	425	1173	1	175.7	11	15.0	13.6	11.2	11.2	4925	11
399	RITE AID	1832	357	3670	9	118.3	15	3.2	3.1	10.0	12.9	1752	5
400	LYONDELL PETROCHEMICAL	1830	350	5729	-12	222.0	-38	3.9	5.5	32.3	182.0	1479	8
401	COMERICA	1815	581	1401	2	153.4	12	10.9	9.9	15.4	14.8	14451	5
402	STRYKER	1807	573	365	30	33.1	40	9.1	8.4	19.4	19.6	242	25
403	AMAX	1804	288	3772	0	30.2	-87	0.8	6.0	3.6	1.3	5542	13
404	NEW YORK STATE ELECTRIC & GAS	1799	390	1556	4	168.6	7	10.8	10.6	7.9	10.6	4925	4
405	MAPCO	1789	414	2783x	-1	125.9	-3	4.5	4.6	15.6	32.7	1729	12
406	NORTHERN TRUST	1768	483	1260	-5	127.4	10	10.1	8.7	NA	18.1	13193	12
407	UNITRIN	1768	NR	1255	3	137.2	4	10.9	10.8	7.3	7.3	4272	2
408	COCA-COLA ENTERPRISES	1767	325	4051	0	-82.4	NM	NM	2.3	NM	-6.5	6677	33
409	CMS ENERGY	1766	260	2941	-1	-250.0	NM	NM	NM	NA	-21.8	7154	-14
410	BORLAND INTERNATIONAL	1757	673	437	23	-75.1	NM	NM	1.7	NM	-31.3	386	5
411	FLIGHTSAFETY INTERNATIONAL	1753	377	268	-2	72.4	-4	27.1	27.7	15.0	15.3	691	11
412	MOLEX	1743	426	740	14	63.3	-4	8.6	10.1	10.0	10.2	773	14
413	KERR-McGEE	1742	295	3274	11	101.6	-10	3.1	3.1	NA	6.8	3421	-2
414	RYDER SYSTEM	1741	423	5061	-2	65.7	-20	1.3	1.6	5.8	4.1	5080	-8
415	CONSOLIDATED PAPERS	1727	363	872	-8	91.4	-36	10.5	15.0	8.3	9.5	1411	18
416	PREMIER INDUSTRIAL	1723	360	632	-1	73.1	-5	11.6	12.0	22.3	22.7	375	12
417	ILLINOIS POWER	1715	430	1475	0	109.2	NM	7.4	NM	NM	5.3	5272	-1
418	SONOCO PRODUCTS	1708	381	1697	2	94.8	88	5.6	3.0	14.1	16.9	1136	2
419	TYCO LABORATORIES	1706	275	3077	20	98.3	-14	3.2	4.4	8.9	9.9	2467	0
420	CHIUQUITA BRANDS INTERNATIONAL	1692	372	4627	8	128.5	37	2.8	2.2	9.4	12.7	2892	57



RATINGS	DIVIDENDS				SHARES				EARNINGS PER SHARE					INDUSTRY GROUP	
	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN- OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES		
													1992 EST. \$		VARI- ATION %
50/29	183	16	2.79	46	67	57	40	68.2	12	2.90	3.04	4.05	7.7	Conglomerates	
33/20	82	25	6.99	174	44	67	69	89.9	12	3.35	1.15	2.75	13.8	Banks B	
19/12	195	25	2.70	67	41	38	106	68.7	12	0.94	0.75	1.10	9.1	Consumer B	
21/12	199	15	3.12	46	70	51	102	89.1	06	1.00	1.30	2.36	9.7	Nonbank fin. A	
52/30	185	13	1.39	18	56	56	40	59.8	12	3.33	3.74	4.16	1.2	Nonbank fin. B	
33/13	139	NM	2.55	DEF	90	46	69	144.0	12	1.59	-0.79	0.77	88.3	Containers B	
80/46	197	43	2.18	93	53	76	25	82.2	12	5.10	1.80	3.88	13.1	Paper A	
101/71	283	30	0.57	17	36	70	22	52.0	12	3.50	3.00	3.66	7.4	Metals B	
30/24	178	13	2.77	35	4	67	75	51.3	02	2.06	2.08d	2.34	2.6	Food A	
25/17	NEG	NM	0.00	0	0	9	100	7.7	12	-1.03	-1.19	-1.16	6.9	Telecomms. A	
21/12	139	NM	0.57	250	36	47	110	67.9	12	1.66	0.04	1.23	22.0	Office equipment B	
33/26	134	11	7.02	75	23	34	65	48.6	12	4.11	2.77	2.75	4.4	Utilities A	
123/91	144	13	2.36	31	26	32	17	19.6	12	7.83	8.81	9.15	2.8	Nonbank fin. B	
99/76	157	33	0.00	0	13	73	20	67.3	07	7.26	2.89	8.15	3.8	Electrical B	
59/33	491	19	1.07	21	49	28	39	27.6	09	2.28	2.51	3.12	2.2	Nonbank fin. A	
61/38	183	48	1.79	85	53	41	34	64.6	12	1.83	1.17	2.77	13.4	Automotive A	
36/29	161	15	5.87	85	4	32	63	21.2	12	2.17	2.06	2.53	2.8	Telecomms. B	
44/25	325	13	4.25	53	39	69	50	116.1	12	NA	3.00	3.51	1.7	Banks A	
27/19	282	29	1.61	46	18	14	75	4.2	12	0.63	0.87	1.11	6.3	Publishing/TV B	
35/26	127	12	3.24	39	-4	48	60	50.2	09	3.27	2.56	3.15	7.6	Fuel B	
77/45	149	NM	6.58	DEF	-30	61	40	46.5	12	2.37	-1.05	1.67	34.1	Fuel B	
60/37	168	11	3.52	40	59	45	33	112.8	12	4.63	4.90	5.22	4.0	Banks B	
59/40	118	10	3.13	33	36	50	34	43.7	12	4.41	5.14	4.60	4.1	Nonbank fin. B	
24/17	200	14	2.63	38	4	69	88	73.6	02	1.30	1.45d	1.64	3.0	Health care A	
26/20	1500	8	7.87	65	23	36	80	37.7	12	4.45	2.78	1.90	24.7	Chemicals	
61/34	179	12	3.23	38	71	54	31	61.9	12	4.95b	5.01	5.56	3.1	Banks B	
52/18	1069	54	0.13	7	117	71	48	97.5	12	0.50	0.70	0.90	6.7	Health care D	
28/16	81	61	3.86	235	-17	67	87	77.5	12	2.58	0.34	0.39	148.7	Metals A	
30/24	128	11	8.00	90	15	33	68	37.3	12	2.48	2.36	2.53	2.8	Utilities A	
64/45	465	14	1.67	24	39	79	30	65.4	12	4.13	4.20	5.24	3.2	Fuel B	
53/33	264	15	1.87	28	60	65	35	58.7	12	3.09	3.43	3.82	1.8	Banks B	
42/31	93	13	2.93	39	-8	34	52	45.0	12	2.40	2.58	2.65	6.8	Nonbank fin. B	
20/12	126	NM	0.36	DEF	-16	41	129	32.0	12	0.65	-0.79	0.23	69.6	Consumer C	
33/17	147	NM	2.17	DEF	-37	74	80	86.3	12	-6.07	-3.26	1.99	15.1	Utilities A	
87/40	732	74	0.00	0	53	67	25	594.0	03	1.81	0.95d	3.14	13.1	Office equipment C	
57/39	371	24	0.55	13	5	49	34	40.2	12	2.22	2.11	2.39	5.0	Transportation C	
40/26	281	27	0.06	2	37	20	50	37.3	06	1.24	1.30	1.38	5.1	Electrical D	
47/35	116	17	4.21	72	-18	68	48	57.1	12	2.26	2.10	2.30	15.2	Fuel B	
25/16	131	32	2.54	80	34	74	74	66.7	12	0.96	0.75	1.33	9.0	Transportation C	
45/32	180	19	3.24	61	2	24	44	24.7	12	3.27	2.10	1.91	25.7	Paper B	
33/25	534	22	1.61	36	6	21	58	10.2	05	1.30	1.35d	1.55	7.7	Services B	
25/18	116	22	0.89	19	29	59	77	47.4	12	-1.53	1.04	1.94	12.9	Utilities A	
41/29	304	18	2.33	42	10	29	43	37.9	12	1.16	2.20	2.46	9.4	Containers B	
52/28	171	14	0.99	14	-17	67	47	76.7	06	2.51	2.57	2.15	2.8	Manufacturing C	
51/32	167	13	1.80	24	-3	83	51	97.1	12	2.23	2.55	2.84	1.4	Food B	

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	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %
421	SAFEWAY	1685	407	15119	2	79.0	-9	0.5	0.6	NA	30.0	5181	9
422	DPL	1682	434	1006	5	129.0	-21	12.8	17.1	9.1	11.1	2973	2
423	JAMES RIVER CORP. OF VIRGINIA	1681	296	4562	-16	78.3	0	1.7	1.4	4.0	2.4	5627	-2
424	HUBBELL	1680	405	756	5	90.6	5	12.0	12.0	17.7	17.9	670	10
425	ENGELHARD	1675	518	2436y	-17	87.9	25	3.6	2.4	12.0	11.6	1256	-5
426	LOCTITE	1669	464	561	1	71.9	7	12.8	12.1	19.7	19.9	529	8
427	FMC	1667	461	3899	5	173.1	11	4.4	4.2	18.5	69.4	2816	-5
428	BANDAG	1664	429	583	-1	79.6	1	13.7	13.4	NA	29.4	442	13
429	AVERY DENNISON	1664	401	2545	-2	63.0	968	2.5	0.2	7.4	7.6	1740	-8
430	ALCO STANDARD	1663	454	4807y	3	91.7	18	1.9	1.7	NA	10.9	1948	-5
431	ORYX ENERGY	1643	214	1601y	-25	19.0	-92	1.2	10.6	7.4	1.0	4329	-19
432	ALLERGAN	1640	411	839	6	-61.4	NM	NM	9.8	NM	-13.8	834	-12
433	SNAP-ON TOOLS	1636	460	882y	-5	73.2	-27	8.3	10.8	11.1	11.2	915	1
434	BENEFICIAL	1631	469	1810	3	148.8	14	8.2	7.4	8.7	12.9	9972	8
435	MARRIOTT	1630	370	8331	9	82.0	74	1.0	0.6	6.5	18.0	6807	2
436	FIRSTAR	1628	674	1254	1	134.3	14	10.7	9.5	16.3	14.2	12309	2
437	GENERAL CINEMA	1625	379	3584y	-2	-257.2	NM	NM	2.0	-11.0	-56.9	6208	102
438	BOATMEN'S BANCSHARES	1624	455	1588	5	150.1	11	9.5	8.9	14.0	11.2	17635	1
439	BETZ LABORATORIES	1623	416	666	12	75.5	15	11.3	11.0	21.2	27.6	476	11
440	SCANA	1616	413	1148	0	142.6	-24	12.4	16.4	NA	13.6	3306	5
441	SOUTHWEST AIRLINES	1615	512	1314	11	26.9	-43	2.1	4.0	4.7	4.3	1837	25
442	KEMPER	1599	399	3130	7	204.6	1622	6.5	0.4	13.6	11.5	14020	3
443	CABLETRON SYSTEMS	1599	531	263	68	52.4	69	19.9	19.8	28.5	28.5	208	86
444	INTERNATIONAL GAME TECHNOLOGY	1597	938	250	16	35.2	65	14.1	9.9	16.6	26.4	366	69
445	PARKER HANNIFIN	1592	453	2354	-7	45.8	-57	1.9	4.2	5.5	4.8	1866	-6
446	CARTER-WALLACE	1587	566	666	9	45.6	-14	6.8	8.7	11.3	11.2	572	5
447	PANHANDLE EASTERN	1582	448	2454	-18	85.1	NM	3.5	NM	7.0	6.5	6177	-4
448	BMC SOFTWARE	1576	552	176	50	43.2	87	24.5	19.7	33.6	32.7	207	62
449	BHC COMMUNICATIONS	1573	398	263	-6	108.1	-78	41.2	173.0	6.6	6.8	2012	7
450	SUNDSTRAND	1570	504	1669	4	108.8	-6	6.5	7.2	14.0	16.7	1720	9
451	FIRST FINANCIAL MANAGEMENT	1563	592	1507y	18	89.0	22	5.9	5.7	16.1	9.0	5497	0
452	OKLAHOMA GAS & ELECTRIC	1551	394	1315	7	133.9	-4	10.2	11.3	10.1	14.5	2566	2
453	WHITMAN	1549	272	2393	4	80.4	NM	3.4	NM	10.9	17.8	2123	-37
454	HOMESTAKE MINING	1542	376	411y	-20	-99.9	NM	NM	NM	NM	-14.9	927	-14
455	JOHNSON CONTROLS	1539	511	4626	1	99.0	12	2.1	1.9	8.3	10.2	2832	1
456	CHARMING SHOPPES	1536	659	1021	15	58.3	45	5.7	4.6	16.5	17.3	663	27
457	MURPHY OIL	1534	451	1690y	-15	-9.6	NM	NM	5.7	-1.8	-0.8	2175	2
458	NIPSCO INDUSTRIES	1533	452	1535	1	145.1	5	9.5	9.1	9.6	12.9	3648	1
459	BLACK & DECKER	1531	587	4637	-4	53.0	4	1.1	1.1	6.0	6.2	5533	-6
460	PREMARK INTERNATIONAL	1523	690	2816	3	102.3	97	3.6	1.9	11.7	13.2	1986	-5
461	UNISYS	1516	549	8696	-14	-1393.3	NM	NM	NM	NM	NM	8432	-18
462	CIRCUIT CITY STORES	1516	629	2628	13	60.9	-8	2.3	2.8	13.8	15.2	1204	18
463	OWENS-CORNING FIBERGLAS	1515	546	2783	-9	-515.0	NM	NM	2.4	NM	NM	2106	17
464	WILLIAMS	1509	456	2105	16	110.0	43	5.2	4.2	NA	9.5	4123	2
465	UNION TEXAS PETROLEUM HOLDINGS	1509	419	1080y	-19	279.5	141	25.9	8.7	NA	37.7	2247	7



DATE	DIVIDENDS					SHARES				EARNINGS PER SHARE					INDUSTRY GROUP
	12 MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT. MIL.	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST. \$	VARI- ATION %	
22/15	640	25		0.00	0	23	17	98	53.9	12	0.91	0.69	1.41	2.1	Food C
26/20	156	14		6.65	94	29	35	69	40.9	12	2.23	1.73	2.05	5.9	Utilities A
28/17	76	31		2.91	91	-18	79	82	68.3	12	0.66	0.66	0.96	44.8	Paper B
60/45	332	19		2.75	52	28	50	31	14.2	12	2.74	2.87	3.15	1.3	Electrical A
37/23	221	19		2.15	41	57	53	45	47.1	12	1.57	1.96	2.19	2.3	Chemicals
51/30	462	23		1.48	34	44	43	36	34.3	12	1.70	1.98	2.21	3.6	Chemicals
53/35	668	10		0.00	0	30	60	35	45.8	12	4.30	4.77	4.72	4.5	Manufacturing C
135/87	614	21		1.00	21	32	52	14	26.4	12	5.50	5.72	6.25	2.6	Automotive C
28/20	202	27		2.95	78	19	59	61	45.8	12	0.10	1.02	1.41	6.4	Manufacturing A
40/29	198	19		2.47	47	21	56	45	45.3	09	2.19	1.95	2.37	3.0	Conglomerates
40/21	277	NM		5.82	1500	-42	44	80	57.4	12	2.26	0.08	0.18	377.8	Fuel B
27/18	369	NM		1.48	DEF	26	86	67	57.0	12	1.21	-0.92	1.53	2.6	Health care B
39/28	251	22		2.79	62	19	67	42	47.5	12	2.45	1.75	2.32	4.3	Manufacturing B
67/52	146	11		4.13	45	24	73	26	60.1	12	5.61	5.80	6.53	3.1	Nonbank fin. A
23/14	358	21		1.64	35	13	38	95	81.6	12	0.46	0.80	0.99	18.2	Leisure C
54/29	178	12		2.70	34	78	40	31	32.9	12	4.10	4.27	4.77	1.5	Banks B
25/17	347	NM		2.40	DEF	-11	48	75	43.4	10	1.51	-3.88	0.90	5.6	Conglomerates
49/35	121	11		5.05	53	31	46	38	70.0	12	3.90	4.07	4.37	1.6	Banks B
66/47	634	23		2.18	50	29	71	28	94.2	12	2.12	2.47	2.72	2.9	Chemicals
44/35	162	12		6.61	78	18	40	41	32.0	12	4.44	3.37	3.43	2.0	Utilities A
41/22	260	61		0.26	16	48	67	42	111.9	12	1.10	0.63	1.81	21.0	Transportation A
46/29	90	8		2.78	22	12	48	48	58.5	12	0.25	4.25	4.40	8.0	Nonbank fin. B
66/30	869	28		0.00	0	65	40	28	104.6	02	1.35	2.07d	2.59	5.8	Office equipment C
60/12	1195	54		0.00	0	381	60	28	202.8	09	0.69	1.04	1.46	6.9	Manufacturing A
35/24	165	27		2.79	75	35	75	48	51.7	06	2.26	1.23	1.47	8.2	Manufacturing A
138/59	391	29		0.96	28	87	36	15	61.1	03	3.37	3.57d	4.21	3.1	Health care B
17/10	121	17		5.47	93	7	59	108	67.8	12	-2.63	0.86	1.02	10.8	Utilities B
79/33	1225	34		0.00	0	65	66	25	200.3	03	1.02	1.83d	2.36	4.7	Office equipment C
59/51	98	15		0.00	0	8	26	28	11.7	12	16.56	3.89	3.65	NM	Publishing/TV A
47/28	241	14		2.54	36	46	77	36	55.6	12	3.15	3.02	3.38	4.4	Aerospace
50/29	157	15		0.24	3	54	68	37	105.0	12	2.68	2.88	3.34	7.2	Nonbank fin. A
44/37	170	12		6.91	81	7	36	40	32.3	12	3.38	3.27	3.28	5.5	Utilities A
27/11	344	19		1.66	32	-33	69	107	61.2	12	-0.68	0.76	0.94	6.4	Conglomerates
18/14	231	NM		1.29	DEF	-3	35	99	85.2	12	-0.19	-1.01	0.03	700.0	Metals C
40/27	173	18		3.29	61	41	59	40	48.8	09	2.05b	2.11	2.61	6.1	Electrical C
31/13	457	28		0.39	11	111	65	50	237.5	01	0.79	1.10	1.29	4.7	Retailing
40/32	130	NM		3.52	DEF	-10	57	45	38.0	12	3.00	-0.24	1.92	16.1	Fuel B
27/19	152	12		5.39	64	23	56	67	79.3	12	1.81	1.94	2.08	2.9	Utilities A
27/12	180	31		1.62	49	106	58	62	150.9	12	0.84	0.81	1.31	11.5	Manufacturing B
50/21	196	15		1.71	26	145	63	31	88.7	12	1.64	3.25	3.79	5.0	Conglomerates
12/3	475	NM		0.00	0	120	19	162	179.6	12	-3.45	-9.37	0.35	137.1	Office equipment B
33/15	377	22		0.31	7	101	72	47	145.9	02	1.22	1.45d	1.80	4.4	Consumer B
39/17	NEG	NM		0.00	0	48	80	41	172.5	12	1.78	-12.17	2.61	31.4	Housing A
41/30	146	15		3.86	60	28	71	42	74.0	12	1.58	2.35	2.55	6.7	Utilities B
21/16	238	8		1.13	9	-4	14	86	21.6	12	0.81	2.35	1.24	11.3	Fuel B



RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %
466	HEALTHTRUST	1507	NR	2104	12	24.1	NM	1.1	NM	5.3	-52.2	2527	8
467	T ² MEDICAL	1504	670	166y	87	39.1	96	23.6	22.4	22.4	22.2	223	40
468	POLICY MANAGEMENT SYSTEMS	1503	567	415	20	47.6	28	11.5	10.7	NA	9.9	565	16
469	A. SCHULMAN	1502	647	708	-3	42.0	10	5.9	5.2	16.2	16.7	384	3
470	PINNACLE WEST CAPITAL	1501	550	1475	-7	-306.9	NM	NM	6.4	NM	-25.7	6483	-8
471	RUSSELL	1496	529	805	13	56.8	-16	7.1	9.5	10.3	11.8	818	3
472	SHAW INDUSTRIES	1495	704	1619	-2	36.0	-40	2.2	3.6	9.3	10.0	817	3
473	DQE	1492	449	1199	6	144.4	6	12.0	12.0	NA	12.0	3909	0
474	KROGER	1490	349	21351	5	100.7	21	0.5	0.4	25.3	NM	4114	0
475	DANA	1490	477	4591	-12	13.5	-82	0.3	1.4	NM	1.4	4179	-7
476	OFFICE DEPOT	1482	919	1301	44	14.4	25	1.1	1.3	7.6	7.3	559	57
477	DREYFUS	1480	431	282y	8	67.9	9	24.1	23.8	9.8	9.4	838	2
478	PUBLIC SERVICE CO. OF COLORADO	1478	472	1795	4	149.7	2	8.3	8.4	10.7	13.3	3473	7
479	AMERICAN GREETINGS	1474	495	1513	10	92.7	17	6.1	5.8	10.3	11.1	1474	13
480	CONTINENTAL CORP.	1467	402	5466a	-6	125.6	-21	2.3	2.8	5.6	2.5	14108	2
481	TELEDYNE	1462	468	3207	-7	-25.4	NM	NM	2.0	NM	-5.6	1719	3
482	STRIDE RITE	1461	557	574	11	66.0	19	11.5	10.8	27.1	27.4	332	23
483	GIANT FOOD	1459	365	3397	1	102.2	-13	3.0	3.5	13.7	16.9	1252	10
484	VULCAN MATERIALS	1448	437	1007	-9	52.6	-56	5.2	10.9	7.6	7.7	1073	-4
485	LOWE'S	1447	503	3056	8	6.5	-91	0.2	2.5	NM	1.0	1441	20
486	MANUFACTURERS NATIONAL	1439	612	1160	0	120.2	11	10.4	9.3	23.7	14.8	13544	12
487	ADVANCED MICRO DEVICES	1439	645	1227	16	145.3	NM	11.8	NM	NM	17.2	1292	16
488	SAFETY-KLEEN	1437	311	695	18	51.6	-7	7.4	9.4	8.8	11.5	860	3
489	MERCANTILE STORES	1437	435	2442y	3	114.0	-8	4.7	5.2	8.9	9.4	1735	4
490	CUC INTERNATIONAL	1435	720	521a	22	27.7	95	5.3	3.3	32.0	110.8	276	20
491	GEO. A. HORMEL	1427	417	2764	0	83.0	0	3.0	3.0	14.0	14.2	857	7
492	JOSTENS	1425	412	872	6	65.1	5	7.5	7.6	19.4	21.2	525	3
493	EG&G	1423	502	2689	9	81.2	10	3.0	3.0	22.4	20.9	698	3
494	AES	1420	NR	334	75	42.6	175	12.8	8.2	NA	33.3	1440	20
495	POLAROID	1419	446	2071	5	683.7	353	33.0	7.7	48.0	81.2	1889	1
496	C. R. BARD	1412	485	876	12	57.2	42	6.5	5.1	15.6	16.4	658	7
497	BANCORP HAWAII	1411	561	1023	7	112.7	18	11.0	10.0	20.2	16.1	11409	7
498	USX-U.S. STEEL GROUP	1403	NR	4864	-20	-507.0	NM	NM	5.1	NA	-30.5	5607	0
499	BANK OF BOSTON	1401	781	4547	-20	-34.4	NM	NM	NM	NA	-3.4	32700	0
500	METRO MOBILE CTS	1392	585	244	1	-101.7	NM	NM	NM	NM	NM	424	8
501	LOTUS DEVELOPMENT	1388	510	829	20	43.1	85	5.2	3.4	NA	11.7	726	10
502	EQUIFAX	1386	395	1094	1	54.1	-15	4.9	5.9	12.7	13.7	709	-1
503	ENRON OIL & GAS	1385	385	388	4	54.9	21	14.2	12.2	NM	8.7	1456	3
504	RAYCHEM	1374	526	1273	6	-24.1	NM	NM	NM	NM	-3.4	1330	-3
505	AMERIRUST	1368	835	1119	-13	-86.5	NM	NM	NM	NM	-15.5	10181	-1
506	TANDEM COMPUTERS	1365	386	1933	3	-66.5	NM	NM	5.2	NM	-5.7	1962	7
507	SERVICE CORP. INTERNATIONAL	1361	501	643	14	73.4	15	11.4	11.3	8.3	12.7	2123	2
508	MEDICAL CARE INTERNATIONAL	1354	547	282	17	38.3	28	13.6	12.4	18.0	15.9	523	50
509	WORTHINGTON INDUSTRIES	1354	572	891	-4	46.3	-18	5.2	6.1	11.5	12.5	591	0
510	PACIFIC ENTERPRISES	1351	221	6599	-5	-80.0	NM	NM	NM	1.9	-6.2	6701	-1



RATINGS	DIVIDENDS					SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN- OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST. \$	VARI- ATION %
24/14	1445	NM	0.00	0	NA	41	81	NA	08	-2.03	-1.15	1.35	NM	Health care C
68/21	834	43	0.00	0	109	49	34	237.5	09	0.57	1.02	1.46	4.8	Health care C
73/43	314	31	0.00	0	39	75	23	44.3	12	1.80b	2.14	2.55	2.4	Nonbank fin. A
35/22	600	24	0.83	20	35	39	44	47.0	08	1.20	1.43	1.44	2.1	Chemicals
18/10	113	NM	0.00	0	53	48	87	54.2	12	0.81	-3.91	1.57	14.7	Utilities A
40/22	313	27	0.87	23	48	47	41	40.1	12	1.65	1.38	2.05	6.3	Consumer A
25/11	417	42	1.24	52	108	60	62	113.8	06	1.06	0.58	1.95	8.7	Manufacturing D
31/24	134	11	5.43	61	23	24	53	40.4	12	2.24	2.50	2.60	1.9	Utilities A
25/15	NEG	15	0.00	0	-9	41	88	73.4	12	0.96	1.12	1.57	4.5	Food C
37/25	151	NM	4.41	485	28	64	41	39.7	12	1.85	0.33	1.27	22.8	Automotive B
57/22	750	96	0.00	0	133	57	29	225.3	12	0.60	0.54	1.25	4.0	Services B
50/31	204	22	1.35	29	19	72	38	82.0	12	1.56	1.77	2.41	6.6	Nonbank fin. A
27/21	143	11	7.62	81	27	31	56	55.3	12	2.49	2.48	2.41	5.0	Utilities A
43/31	176	15	1.89	28	15	76	36	153.7	02	2.61	2.81d	3.13	1.6	Leisure D
30/23	69	28	9.67	271	12	74	55	61.5	12	2.53	0.96	0.58	101.7	Nonbank fin. B
27/17	322	NM	3.03	DEF	21	34	55	51.1	12	1.25	-0.46	1.88	18.6	Conglomerates
32/18	608	22	1.06	23	63	71	51	86.6	11	1.06	1.28	1.52	2.6	Consumer A
31/21	241	16	2.69	43	-12	30	60	38.9	02	2.01	1.53d	1.72	5.8	Food C
40/34	212	28	3.15	87	9	58	38	19.9	12	3.10	1.38	2.37	10.5	Housing A
44/23	216	NM	1.41	311	35	48	36	90.7	01	1.91	0.18	2.04	8.3	Retailing
48/26	178	12	2.87	35	78	54	31	109.1	12	3.53b	3.76	4.08	8.8	Banks B
22/8	184	11	0.00	0	126	56	84	364.6	12	-0.78	1.53	2.35	20.4	Electrical D
38/22	320	28	1.27	36	-22	53	57	68.2	12	1.05	0.90	1.09	6.4	Services E
43/32	119	13	2.62	33	16	37	37	28.8	01	3.36	3.10	3.67	2.5	Retailing
35/18	5735	37	0.00	0	83	74	45	67.3	01	0.51	0.88d	1.24	2.4	Office equipment A
23/18	245	16	1.93	32	-1	19	77	20.5	10	1.01	1.13	1.25	3.2	Food B
39/29	463	22	2.42	53	1	66	41	51.4	06	1.51	1.58	1.71	2.3	Manufacturing A
52/38	366	17	1.83	32	34	62	28	46.0	12	2.60	2.91	3.17	1.9	Services A
35/19	1108	32	0.61	20	NA	NA	43	NA	12	0.40	1.02	1.18	1.7	Utilities A
32/23	179	2	2.07	5	16	75	49	87.7	12	2.20	12.54	2.42	9.1	Leisure D
34/19	404	25	1.80	44	30	68	53	113.1	12	0.76	1.08	1.36	3.7	Health care D
52/34	202	13	2.35	30	54	63	28	48.9	12	3.67	4.04	4.43	2.3	Banks D
30/22	84	NM	3.64	DEF	NA	62	51	NA	12	6.00	-10.00	1.47	112.2	Metals B
21/7	100	NM	0.00	0	180	47	75	163.2	12	-6.21	-0.64	1.05	27.6	Banks A
23/13	NEG	NM	0.00	0	57	2	64	4.6	09	-1.27	-1.58	0.72	51.4	Telecomms. A
41/18	378	34	0.00	0	47	81	42	510.5	12	0.54	0.98	2.20	6.4	Office equipment C
20/13	351	26	3.08	79	-11	60	82	71.9	12	0.79	0.66	1.08	6.5	Nonbank fin. A
25/17	219	25	1.10	28	-13	12	76	13.1	12	0.60	0.72	0.81	21.0	Fuel B
40/23	192	NM	0.90	DEF	34	77	39	65.5	06	-3.12	-0.63	0.47	36.2	Electrical A
38/11	227	NM	1.78	DEF	232	43	38	177.6	12	-2.71	-2.48	2.31	30.7	Banks B
18/10	117	38	0.00	0	2	73	108	106.1	09	1.13	0.33	0.42	50.0	Office equipment B
28/21	236	17	2.08	36	11	68	51	79.4	12	1.28	1.54	1.73	4.0	Services E
81/42	563	36	0.00	0	31	82	21	326.1	12	1.41	1.80	2.30	2.2	Health care C
26/14	366	23	1.92	44	58	45	59	70.9	05	0.75	0.99d	1.24	6.5	Metals B
42/17	81	NM	0.00	0	-52	26	73	61.5	12	-1.09	-1.45	1.89	18.5	Utilities B



RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %
511	PUGET SOUND POWER & LIGHT	1347	480	957	2	132.8	0	13.9	14.2	9.1	13.0	2485	
512	IMC FERTILIZER GROUP	1340	524	1100	-3	90.0	2	8.2	7.8	8.0	12.2	1884	
513	GULF STATES UTILITIES	1340	467	1702	1	122.4	NM	7.2	NM	6.2	3.0	6911	
514	BRUNO'S	1331	404	2658	5	63.5	-2	2.4	2.6	12.4	15.4	834	
515	BRUNSWICK	1328	463	2088	-16	-23.7	NM	NM	2.9	NM	-3.0	1857	
516	TRITON ENERGY	1318	NR	219y	-18	-13.5	NM	NM	NM	NM	-4.6	641	
517	SONAT	1315	333	1421	5	77.9	-15	5.5	6.7	7.2	6.7	3174	
518	CHARLES SCHWAB	1314	854	795y	27	49.5	195	6.2	2.7	19.3	27.2	5000	
519	CINTAS	1310	599	364	14	33.0	12	9.1	9.2	13.3	15.7	340	
520	POTLATCH	1303	564	1237	-1	55.8	-43	4.5	7.9	5.1	6.1	1892	
521	FOREST LABORATORIES	1294	450	228y	41	46.5	30	20.4	22.0	15.7	15.2	362	
522	TELEPHONE & DATA SYSTEMS	1294	528	354	20	21.1	-22	6.0	9.3	3.2	3.2	1368	
523	SURGICAL CARE AFFILIATES	1293	735	170	38	20.7	80	12.2	9.3	29.5	27.2	179	
524	KANSAS CITY POWER & LIGHT	1288	516	825	1	103.9	1	12.6	12.6	8.6	11.4	2615	
525	INTERNATIONAL SPECIALTY PRODUCTS	1286	NR	528a	5	43.0	62	8.1	5.2	9.6	9.3	1075	
526	MYLAN LABORATORIES	1282	602	117	12	37.1	11	31.7	32.0	19.5	19.4	214	
527	ALEXANDER & BALDWIN	1271	470	721	7	92.4	-20	12.8	17.1	NA	12.6	1555	
528	McKESSON	1271	457	9711y	16	97.6	1	1.0	1.2	10.7	14.7	2714	
529	SOUTHWESTERN PUBLIC SERVICE	1268	513	726	-3	109.7	-2	15.1	14.8	10.8	15.2	1660	
530	CENTOCOR	1267	520	53	-18	-195.6	NM	NM	NM	NM	NM	340	
531	MONTANA POWER	1266	532	498	11	105.7	11	21.2	21.1	9.4	12.3	2077	
532	DESTEC ENERGY	1261	NR	437	6	81.5	16	18.6	17.1	18.4	18.0	624	
533	HUNTINGTON BANCSHARES	1260	575	1219	-3	117.0	37	9.6	6.8	18.8	14.0	12333	
534	CBI INDUSTRIES	1259	523	1615y	3	61.1	11	3.8	3.5	9.1	10.2	1479	
535	NATIONAL SERVICE INDUSTRIES	1257	447	1599	-3	25.3	-75	1.6	6.1	4.0	3.8	1023	
536	TJX	1248	471	2758	13	70.1	-5	2.5	3.0	15.1	26.9	1105	
537	P. H. GLATFELTER	1247	491	568	-9	76.0	-14	13.4	14.1	17.2	17.2	630	
538	HARRIS	1232	538	2997	-2	89.7	149	3.0	1.2	9.0	8.6	2417	
539	ST. JOE PAPER	1220	522	582	-5	27.6	-33	4.7	6.8	3.4	3.4	1342	
540	VALERO ENERGY	1219	590	1012	-13	98.7	4	9.8	8.1	11.5	13.5	1481	
541	SMITH'S FOOD & DRUG CENTERS	1217	540	2217	9	45.1	31	2.0	1.7	7.4	9.5	1197	
542	B. F. GOODRICH	1216	519	2472	2	-80.6	NM	NM	4.8	NM	-7.3	2425	
543	FEDERAL PAPER BOARD	1210	535	1435	4	82.4	-30	5.7	8.6	6.7	NA	2470	
544	AMBAC	1208	NR	187	14	113.7	8	60.7	64.3	13.2	15.2	1432	
545	NORTHROP	1201	474	5694	4	268.2	27	4.7	3.8	20.6	23.8	3128	
546	IPALCO ENTERPRISES	1197	551	648	4	105.2	3	16.2	16.4	10.2	13.3	1817	
547	GREAT ATLANTIC & PACIFIC TEA	1194	316	11624	4	86.2	-44	0.7	1.4	6.7	6.8	3249	
548	ARMSTRONG WORLD INDUSTRIES	1183	553	2439	-3	60.6	-59	2.5	5.8	6.2	6.5	2140	
549	COMPUTER SCIENCES	1182	545	1945	16	65.5	-4	3.4	4.0	8.4	11.3	1342	
550	SYNERGEN	1170	928	14	63	-7.1	NM	NM	NM	NM	-2.0	374	
551	WENDY'S INTERNATIONAL	1169	580	1048	5	51.7	34	4.9	3.9	NA	10.9	880	
552	SILICON GRAPHICS	1159	616	638	32	36.8	8	5.8	8.3	NA	9.3	698	
553	FINA	1157	475	3336	-16	42.0	-67	1.3	3.2	4.9	3.7	2834	
554	VONS	1157	496	5350	0	65.0	31	1.2	0.9	9.8	14.0	1803	
555	NICOR	1156	498	1516	-1	108.6	-4	7.2	7.4	NA	15.4	2095	

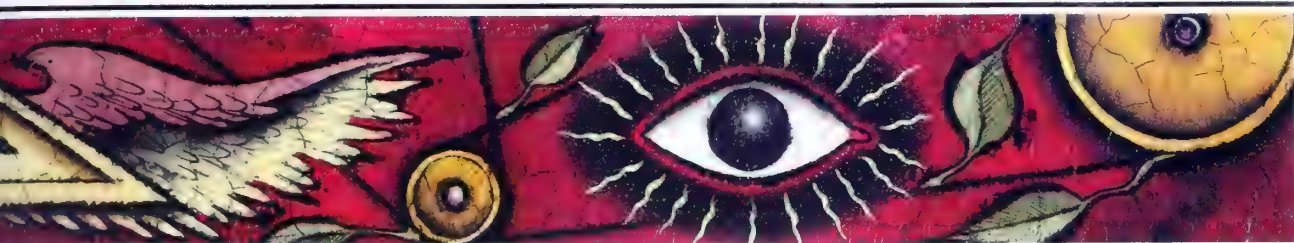


RATINGS	DIVIDENDS					SHARES					EARNINGS PER SHARE				INDUSTRY GROUP
	12-MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST \$ VARI- ATION %		
A	27/21	143	11	7.26	80	23	19	56	34.2	12	2.16	2.21	2.24	2.7	Utilities A
B	68/36	181	16	1.77	28	67	93	22	145.1	06	3.13	3.85	4.25	5.6	Chemicals
C	13/9	67	23	0.00	0	8	61	114	55.8	12	-0.99	0.52	0.83	18.1	Utilities A
D	22/12	322	20	1.23	24	-10	27	82	104.8	06	0.74	0.82	0.81	3.7	Food C
E	17/10	167	NM	2.93	DEF	13	64	89	83.4	12	0.80	-0.27	0.83	26.5	Leisure D
F	53/8	347	NM	0.00	0	332	42	34	411.5	05	-0.04	0.15d	0.27	114.8	Fuel B
G	47/29	113	17	6.53	110	-23	69	43	71.8	12	2.59	1.82	2.16	11.6	Utilities B
H	37/12	721	27	0.47	13	174	34	39	76.4	12	0.41	1.27	1.70	6.5	Nonbank fin. A
I	64/38	622	33	0.33	11	57	31	23	48.1	05	1.47	1.70d	2.05	2.0	Services E
J	47/30	142	23	3.12	73	43	43	29	57.6	12	3.41	1.92	2.78	11.9	Paper B
K	44/29	423	29	0.00	0	18	65	39	126.2	03	0.90	1.14d	1.43	2.1	Health care B
L	41/29	213	63	0.81	51	15	69	35	43.3	12	0.86	0.59	0.65	21.5	Telecomms. A
M	46/16	1697	64	0.30	19	106	47	36	193.2	12	0.33	0.57	0.78	5.1	Health care C
N	48/35	150	13	6.73	89	24	32	31	60.1	12	3.11	3.16	3.51	2.9	Utilities A
O	18/12	278	20	0.00	0	NA	15	100	NA	12	NR	0.64d	0.85	7.1	Chemicals
P	43/22	669	32	0.60	19	51	51	38	106.0	03	0.90	1.06d	1.36	5.1	Health care B
Q	30/22	173	14	3.20	44	6	45	46	56.5	12	2.50	2.00	2.22	2.7	Transportation D
R	40/32	214	14	4.89	67	1	55	39	50.3	03	2.46	2.38d	2.64	5.3	Health care A
S	34/27	188	12	7.10	84	16	27	41	48.3	08	2.73	2.63	2.56	2.7	Utilities A
T	60/29	816	NM	0.00	0	18	61	36	816.9	12	-5.10	-5.72	0.17	741.2	Health care B
U	28/21	152	12	6.16	76	29	42	51	50.3	12	1.84	2.03	2.10	2.4	Utilities A
V	29/15	278	15	0.00	0	NA	24	62	53.3	12	1.56	1.39	1.53	3.9	Utilities A
W	22/14	151	11	3.90	42	48	20	61	27.0	12	1.38	1.90	2.09	1.9	Banks B
X	38/26	241	22	1.39	31	8	73	37	57.2	12	1.58	1.54	1.90	7.4	Fuel C
Y	27/19	189	39	3.94	154	2	56	50	38.8	08	2.02	0.65	1.54	10.4	Electrical A
Z	20/14	479	18	2.57	46	25	80	70	78.3	01	1.06	1.00	1.31	4.6	Retailing
AA	60/50	283	17	2.15	36	15	74	22	14.6	12	3.76	3.34	3.66	2.7	Paper B
AB	34/21	118	63	3.30	208	32	75	39	71.1	06	3.30	0.50	2.29	6.6	Electrical B
AC	40/29	150	44	0.50	22	4	90	31	10.2	12	1.35	0.90	1.05	6.7	Containers B
AD	33/19	178	13	1.20	16	64	65	41	85.3	12	2.31	2.28	2.83	9.5	Fuel B
AE	44/30	257	25	1.08	27	1	33	30	57.1	12	1.36	1.65	1.89	3.2	Food C
AF	48/36	99	NM	4.60	DEF	16	74	25	88.7	12	4.23	-3.50	1.88	26.6	Chemicals
AG	33/23	137	17	3.36	57	31	69	41	128.1	12	2.58b	1.77	2.27	13.7	Containers B
AH	36/20	162	11	1.16	12	NA	48	35	NA	12	2.11	3.25	3.20	3.4	Nonbank fin. B
AI	31/20	107	4	4.71	21	4	40	47	59.2	12	4.48	5.69	4.36	10.1	Aerospace
AJ	34/26	156	12	5.90	69	27	38	38	35.2	12	2.58	2.72	2.75	1.5	Utilities A
AK	58/25	95	18	2.56	47	-39	36	38	57.1	02	3.95	1.72d	2.19	19.6	Food C
AL	35/24	186	29	3.76	108	12	76	37	81.8	12	3.18	1.11	1.76	13.6	Consumer B
AM	84/52	203	18	0.00	0	37	76	16	112.1	03	4.02	4.14d	4.88	5.5	Office equipment C
AN	75/16	324	NM	0.00	0	118	78	25	574.4	12	-0.41	-0.36	0.86	29.1	Health care B
AO	13/8	247	23	2.00	46	64	36	97	145.1	12	0.40	0.52	0.62	6.5	Leisure A
AP	30/13	336	37	0.00	0	44	72	44	164.0	06	0.85	0.73	0.96	6.3	Office equipment B
AQ	91/65	103	28	4.30	118	2	3	16	2.0	12	8.11	2.71	NA	NM	Fuel B
AR	34/22	250	17	0.00	0	3	34	43	81.8	12	1.28	1.56	1.92	4.7	Food C
AS	47/39	165	11	5.62	60	9	54	29	45.0	12	3.86	3.71	4.06	2.7	Utilities B

NOTES TO TABLES APPEAR ON PAGES 162-163



RANK	COMPANY	MARKET VALUE		SALES	CHANGE FROM 1990 %	PROFITS		MARGINS		RETURN ON INVESTED CAPITAL		ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1991 \$ MIL		12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %
556	CONNER PERIPHERALS	1155	397	1599	20	92.5	-29	5.8	9.7	10.0	13.4	1335	52
557	PEP BOYS-MANNY, MOE & JACK	1150	721	971a	9	36.0	-9	3.7	4.4	7.9	9.7	833	10
558	WEIS MARKETS	1145	442	1294	2	80.6	-7	6.2	6.8	12.6	12.6	734	7
559	MARSHALL & ILSLEY	1138	702	835	0	99.3	39	11.9	8.6	15.8	15.0	7628	2
560	BEMIS	1134	560	1142	1	53.0	4	4.6	4.5	13.5	17.1	719	4
561	FLEMING	1132	517	12902	8	72.3	-26	0.6	0.8	6.6	7.0	2971	10
562	CINCINNATI BELL	1132	418	1088	7	42.7	-53	3.9	9.0	7.2	6.7	1743	5
563	PERKIN-ELMER	1131	571	868	1	-4.9	NM	NM	5.2	-1.4	0.0	816	-7
564	CRACKER BARREL OLD COUNTRY STORE	1130	812	346	33	27.4	56	7.9	6.7	12.6	14.5	273	54
565	STRATUS COMPUTER	1130	681	449	11	49.7	34	11.1	9.2	17.6	15.8	385	20
566	MERIDIAN BANCORP	1126	725	1213	-5	107.1	121	8.8	3.8	16.9	13.5	11337	-4
567	A.G. EDWARDS	1123	686	851y	32	91.8	68	10.8	8.5	20.0	19.8	1426	24
568	ARKLA	1121	375	2778	15	18.0	-82	0.6	4.0	4.8	0.9	5010	35
569	U.S. CELLULAR	1117	763	99	59	-24.4	NM	NM	NM	NM	-6.9	617	120
570	NATIONAL SEMICONDUCTOR	1117	636	1656	-4	-150.4	NM	NM	NM	NM	-32.6	1065	-12
571	MGIC INVESTMENT	1116	NR	294	14	75.0	24	25.5	23.3	15.3	15.9	894	26
572	ADOBE SYSTEMS	1115	509	230	36	51.6	29	22.5	23.7	30.6	28.2	221	52
573	BETHLEHEM STEEL	1113	508	4318	-12	-767.0	NM	NM	NM	NM	-78.7	4128	-6
574	E-SYSTEMS	1101	505	1991	10	109.5	16	5.5	5.2	14.3	15.2	1067	16
575	ALLEGHENY LUDLUM	1101	605	1005	-7	41.1	-40	4.1	6.4	10.8	11.4	764	-4
576	UNIFI	1100	856	756	12	36.1	-13	4.8	6.1	9.9	10.0	509	NM
577	CENTURY TELEPHONE ENTERPRISES	1096	576	281	12	37.4	20	13.3	12.4	NA	12.2	765	8
578	PENN CENTRAL	1092	465	1669	54	63.4	-15	3.8	6.8	4.5	4.0	3383	1
579	MCDERMOTT INTERNATIONAL	1089	494	3544	20	37.6	NM	1.1	NM	8.1	5.3	3239	-3
580	THERMO ELECTRON	1084	664	805	12	47.1	35	5.8	4.9	NA	10.5	1085	26
581	ASARCO	1083	476	1910	-14	46.0	-69	2.4	6.8	4.0	3.1	2937	6
582	WANG LABORATORIES	1083	802	1940	-18	-373.4	NM	NM	NM	NM	NM	1312	-25
583	OLD KENT FINANCIAL	1081	706	862	-1	93.0	6	10.8	10.1	16.1	14.2	8826	8
584	DELMARVA POWER & LIGHT	1080	593	845	4	80.5	116	9.5	4.6	7.7	10.3	2264	7
585	GENERAL SIGNAL	1076	617	1616	-5	64.0	NM	4.0	NM	11.5	13.4	1180	-9
586	CRITICAL CARE AMERICA	1075	786	233	30	13.3	-19	5.7	9.2	NA	6.6	239	33
587	PERRIGO	1074	NR	322	NA	19.0	NA	5.9	NA	15.6	11.3	241	NA
588	ANADARKO PETROLEUM	1073	421	337	-13	32.4	-41	9.6	14.2	4.8	5.2	1676	2
589	KELLY SERVICES	1069	484	1438	-2	38.6	-46	2.7	4.8	11.1	11.1	479	8
590	THOMAS & BETTS	1067	586	566	-5	48.5	0	8.6	8.1	11.2	13.3	600	2
591	BRINKER INTERNATIONAL	1063	787	472	23	30.8	50	6.5	5.4	13.9	14.2	277	36
592	AMERICAN NATIONAL INSURANCE	1058	598	1197	9	126.0	16	10.5	9.9	NA	NA	NA	NA
593	PETRIE STORES	1052	570	1343a	4	8.0	-67	0.6	1.8	1.9	1.3	878	-1
594	CRAY RESEARCH	1046	514	862	7	113.0	0	13.1	14.0	14.8	14.9	1079	14
595	FIRST OF AMERICA BANK	1045	594	1434	3	134.9	2	9.4	9.5	11.5	13.2	16755	19
596	LORAL	1043	562	2870	60	112.1	32	3.9	4.7	11.1	11.8	2509	3
597	MERCURY FINANCE	1041	827	116	22	32.8	41	28.4	24.5	17.3	33.6	527	23
598	ECOLAB	1040	726	918	-9	55.7	-4	6.1	5.8	8.4	9.1	1220	21
599	SCIMED LIFE SYSTEMS	1036	712	168	69	30.0	15	17.8	26.1	26.4	26.3	177	96
600	ROCHESTER TELEPHONE	1035	620	703	17	73.3	47	10.4	8.2	NA	12.9	1475	25



RATINGS	DIVIDENDS					SHARES					EARNINGS PER SHARE				INDUSTRY GROUP
	12 MONTH HIGH LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INST. TUTIONS HOLDING	SHRS OUT MIL.	TURN OVER	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST. \$	VAR- IATION %	
0	29/13	167	13	0.00	0	-12	45	58	277.7	12	2.51	1.57	1.76	11.4	Office equipment B
	22/10	311	30	0.63	19	91	63	56	132.6	01	0.67	0.69d	0.85	4.7	Retailing
5	34/25	179	14	2.64	38	-9	49	44	8.1	12	1.93	1.81	2.10	NM	Food C
4	56/30	174	13	2.46	31	69	28	21	38.2	12	3.09b	4.21	4.61	4.8	Banks B
5	48/32	366	22	2.07	45	26	43	26	29.3	12	1.98	2.06	2.33	3.0	Containers B
2	41/28	115	16	3.75	58	-7	71	35	93.3	12	3.06	2.06	3.37	3.6	Food A
3	25/18	196	29	4.35	127	-15	28	62	20.9	12	1.44	0.63	1.11	9.0	Telecomms. B
4	36/25	377	NM	2.03	DEF	22	72	34	80.0	07	1.10	-0.08	1.70	3.5	Electrical C
Y	53/22	598	47	0.07	3	120	60	24	194.7	07	0.71	1.00	1.28	2.3	Leisure A
	54/27	360	23	0.00	0	87	79	22	154.8	12	1.77	2.22	2.53	4.3	Office equipment B
5	27/14	142	10	4.71	47	76	35	44	84.5	12	1.20	2.56	2.32	10.3	Banks A
2	40/19	242	11	1.77	19	78	52	36	64.6	02	1.71	2.91d	3.05	NM	Nonbank fin. A
0	20/9	104	NM	11.22	1200	-45	58	116	85.8	12	1.10	0.09	0.70	35.7	Utilities B
3	25/16	316	NM	0.00	0	32	10	48	8.4	12	-0.51	-0.63	0.43	74.4	Telecomms. A
	11/4	227	77	0.00	0	53	57	104	129.1	05	-1.55	0.14d	0.71	25.4	Electrical D
9	43/27	237	14	0.18	3	NA	91	29	NA	12	2.23	2.68	2.97	0.0	Nonbank fin. B
	69/41	610	22	0.63	14	18	91	22	623.1	11	1.83	2.25	2.62	5.0	Office equipment C
	19/11	111	NM	0.00	0	-6	70	76	110.5	12	-6.45	-10.41	0.47	238.3	Metals B
	44/31	152	10	2.21	22	0	57	32	77.4	12	3.02	3.35	3.74	1.1	Electrical B
	36/20	306	27	2.63	70	35	45	33	34.5	12	2.07	1.25	1.95	18.5	Metals B
5	38/20	304	22	1.72	37	77	73	32	54.4	06	1.06	1.62	1.93	2.1	Manufacturing D
5	37/24	357	29	1.23	36	16	58	31	39.6	12	1.01	1.20	1.34	6.0	Telecomms. A
4	27/22	69	18	3.37	62	12	79	46	25.3	12	1.60	1.30	2.02	5.0	Conglomerates
	28/15	152	42	4.68	196	-18	62	51	113.1	03	-1.97	0.51d	1.10	31.8	Services A
2	48/32	241	21	0.00	0	31	45	26	73.6	12	1.65	1.97	2.21	5.4	Electrical C
5	30/18	72	23	3.05	71	0	50	41	68.0	12	3.60	1.12	1.19	69.7	Metals C
5	8/2	2433	NM	0.00	0	96	24	170	60.5	06	-3.82	-2.26	0.05	240.0	Office equipment B
0	40/24	165	12	3.07	37	64	38	27	65.8	12	3.12b	3.32	3.60	3.1	Banks B
	22/18	153	14	7.51	107	20	25	53	38.2	12	0.60	1.44	1.70	5.9	Utilities A
5	57/40	226	17	3.24	54	34	77	19	59.9	12	-0.69	3.32	3.94	3.8	Manufacturing C
	64/29	533	78	0.00	0	73	80	21	101.7	12	0.92	0.65	1.57	1.9	Health care C
0	36/20	640	74	0.00	0	NA	NA	36	NA	06	NA	0.40	NA	NM	Health care B
0	33/19	172	33	1.54	51	-29	55	55	80.8	12	1.04	0.59	0.57	42.1	Fuel B
5	42/27	306	28	2.03	56	-9	34	30	31.6	12	2.37	1.28	1.67	12.0	Services E
Y	65/50	294	20	3.92	79	13	67	19	43.3	12	2.84	2.84	3.20	2.5	Electrical A
Y	41/20	490	40	0.00	0	96	81	29	87.3	06	0.74	0.92	1.12	1.8	Leisure A
9	45/32	66	8	4.88	40	26	16	27	14.5	12	3.96	4.76	4.25	7.8	Nonbank fin. B
3	25/18	164	47	0.89	42	14	21	47	39.9	01	0.06	0.48d	0.62	19.4	Retailing
1	52/32	138	10	0.00	0	0	78	26	126.5	12	4.02	4.01	4.25	4.0	Office equipment B
9	32/23	115	9	4.41	40	25	35	36	33.5	12	3.18b	3.24	3.18	4.4	Banks B
3	46/33	109	8	2.92	24	-4	74	32	99.9	03	3.55	3.98d	4.41	3.2	Electrical B
5	27/11	1066	32	1.30	42	120	34	42	33.6	12	0.56	0.77	0.97	4.1	Nonbank fin. A
3	34/25	183	17	2.11	37	11	49	31	44.0	12	1.95	1.91	2.06	4.4	Consumer D
0	93/42	909	21	0.00	0	64	79	15	782.0	02	1.98	3.35d	3.47	9.5	Health care D
3	34/28	185	14	4.74	65	21	29	32	22.2	12	1.72	2.36	2.07	3.4	Telecomms. B



RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %
601	SHONEY'S	1034	754	992a	7	38.0	29	3.8	3.2	28.5	NM	429	7
602	HANNAFORD BROTHERS	1029	600	2008y	19	43.4	3	2.2	2.5	11.2	15.0	706	12
603	FAMILY DOLLAR STORES	1026	858	1029	15	44.1	44	4.3	3.4	18.7	18.7	435	19
604	ATLANTIC ENERGY	1024	627	778	9	102.0	28	13.1	11.1	8.9	11.3	2151	7
605	KANSAS GAS & ELECTRIC	1023	633	595	1	53.6	-16	9.0	10.9	7.7	8.3	2357	0
606	HARLEY-DAVIDSON	1021	821	940	9	37.0	-3	3.9	4.4	NA	16.1	469	15
607	SEAGATE TECHNOLOGY	1020	558	2669	0	-11.1	NM	NM	3.6	NM	-1.5	1742	6
608	DUTY FREE INTERNATIONAL	1018	915	188y	79	23.8	63	12.7	13.9	14.4	19.7	199	59
609	DEAN FOODS	1015	478	2168	1	72.7	9	3.4	3.1	13.8	16.3	883	1
610	BLOCK DRUG	1012	604	549	11	56.4	11	10.3	10.3	12.5	13.1	618	16
611	PROVIDENT LIFE & ACCIDENT	1012	543	2846y	3	117.2	-35	4.1	6.5	NA	8.4	14800	9
612	ILLINOIS CENTRAL	1010	944	550	1	65.4	42	11.9	8.5	15.1	25.1	1184	3
613	WITCO	1010	634	1631	0	73.5	8	4.5	4.2	10.2	12.2	1198	2
614	FOSTER WHEELER	1009	499	1992	20	43.3	13	2.2	2.3	NA	8.4	1635	13
615	MIDWEST RESOURCES	994	931	1025	11	73.8	9	7.2	7.3	NA	10.9	2384	3
616	MILLIPORE	992	507	748	6	60.4	117	8.1	4.0	11.4	12.6	784	7
617	KING WORLD PRODUCTIONS	991	479	505	10	93.6	8	18.5	18.9	36.0	33.5	591	22
618	20th CENTURY INDUSTRIES	989	582	880a	14	123.4	52	14.0	10.5	26.2	22.0	1370	11
619	PROGRESSIVE	984	424	1493y	9	32.9	-65	2.2	6.8	NM	7.0	2959	11
620	OGDEN	983	589	1568	1	57.6	-1	3.7	3.7	5.0	11.8	2856	5
621	OLIN	982	591	2275	-12	-12.7	NM	NM	3.2	NM	-3.6	2012	8
622	WEST POINT-PEPPERELL	978	569	1192a	-3	-10.5	NM	NM	NM	-15.3	0.9	2329	-9
623	MULTIMEDIA	977	611	524	9	48.4	-1	9.2	10.1	25.2	NM	557	4
624	SHAWMUT NATIONAL	977	846	2344	-15	-170.7	NM	NM	NM	NM	-17.2	22816	-4
625	OMNICOM GROUP	976	666	1236	5	57.1	10	4.6	4.4	14.5	17.8	1616	0
626	GENZYME	975	746	109	118	NA	NA	NA	NM	NA	-1.4	268	129
627	BALL	974	747	2267	67	66.2	32	2.9	3.7	8.7	11.5	1578	66
628	UTILICORP UNITED	973	736	1075	20	73.5	25	6.8	6.6	8.8	12.6	2402	30
629	LG&E ENERGY	968	614	715	2	92.4	12	12.9	11.8	8.6	12.3	2054	3
630	COUNTRYWIDE CREDIT INDUSTRIES	965	NR	279y	41	45.0	137	16.2	9.6	10.9	10.5	1970	63
631	CONSECO	962	NR	1392y	85	121.0	190	8.7	5.5	21.4	60.3	11600	40
632	LEGENT	960	608	208	15	36.2	4	17.4	19.2	15.9	16.3	298	52
633	HARTFORD STEAM BOILER INSPECTION	959	492	630	12	73.9	-6	11.7	14.0	16.7	18.5	889	7
634	CHIRON	958	537	65a	38	11.8	NM	18.2	NM	NA	4.2	431	68
635	AMSOUTH BANCORPORATION	958	745	900	0	80.4	5	8.9	8.6	14.8	11.4	9459	9
636	FUND AMERICAN	958	344	241a	-11	184.0	179	76.3	24.4	13.1	7.1	2828	-75
637	BOSTON EDISON	957	642	1320	5	94.7	19	7.2	6.3	9.5	10.2	3120	4
638	OHIO CASUALTY	956	658	1687a	5	96.7	27	5.7	4.7	11.2	12.9	3531	9
639	COLUMBIA GAS SYSTEM	954	312	2577	9	794.8	NM	NM	4.4	NM	-95.5	5850	1
640	CUMMINS ENGINE	952	889	3406	-2	-65.6	NM	NM	NM	NM	-14.7	2011	-3
641	PROMUS	947	795	1031	3	30.0	29	2.9	2.3	9.1	7.9	1479	1
642	SOUTHRUST	944	796	933	7	90.0	29	9.7	8.0	17.7	14.3	10158	13
643	ECHLIN	942	680	1681	2	43.6	-3	2.6	2.7	6.8	6.6	1219	-5
644	CRAWFORD	942	687	538	20	37.4	17	7.0	7.2	22.3	22.6	293	8
645	KANSAS POWER & LIGHT	942	638	1162	1	72.3	-9	6.2	6.9	8.6	10.5	2120	5

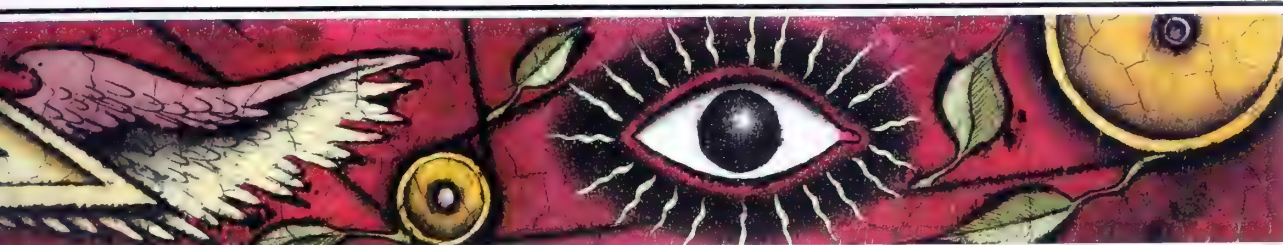


RAT		DIVIDENDS				SHARES				EARNINGS PER SHARE				INDUSTRY GROUP	
12 MONTH HIGH/LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INST. TUTIONS HOLDING %	SHRS OUT MIL	TURN OVER %	Fr	1990 ACTUAL \$	199 ACTUAL \$	ANALYSTS EST \$	ESTIMATES VARIATION %		
27/14	NEG	28	0.00	0	75	67	40	74.3	10	0.76	0.94	1.13	2.7	Leisure A	
57/40	358	24	1.01	24	41	36	20	24.6	12	2.13	2.16	2.58	3.5	Food C	
20/7	434	25	1.20	30	155	57	56	90.8	08	0.52	0.73	0.89	3.4	Retailing	
42/34	136	12	7.45	86	23	22	25	37.9	12	3.02	3.49	3.55	2.8	Utilities A	
35/25	162	19	5.21	101	36	28	31	79.5	12	2.00	1.70	2.13	4.7	Utilities A	
61/26	446	28	0.00	0	107	77	18	211.7	12	2.15	2.08	2.99	6.4	Leisure D	
20/7	138	16	0.00	0	6	45	66	520.7	06	1.92	0.95	0.09	222.2	Office equipment B	
56/18	843	39	0.00	0	132	53	24	172.3	01	0.67	1.08	1.32	2.3	Retailing	
34/25	227	14	2.25	31	-17	35	41	36.0	05	1.79	1.82d	2.05	5.4	Food B	
61/44	236	NA	1.59	NA	31	24	18	15.6	03	2.88	NA	NA	NM	Consumer D	
25/17	72	9	4.52	40	12	43	46	38.0	12	3.85	2.53	3.01	10.3	Nonbank fin. B	
25/10	386	15	0.00	0	145	32	42	96.3	12	1.31	1.64	1.90	4.2	Transportation B	
48/34	167	14	3.97	57	34	72	22	39.3	12	2.95	3.21	3.39	3.0	Chemicals	
34/21	196	23	1.90	44	-13	64	36	85.6	12	1.08	1.22	1.53	11.1	Services A	
21/18	158	15	7.90	115	13	8	50	18.3	12	1.25	1.36	1.59	3.1	Utilities A	
48/32	208	16	1.35	22	-10	76	28	59.1	12	1.00	2.17	2.42	4.1	Electrical C	
35/22	354	11	0.00	0	-14	58	38	68.2	08	2.15	2.38	2.40	1.3	Leisure B	
26/17	210	10	2.70	26	18	32	51	37.9	12	1.93	2.02	2.02	11.4	Nonbank fin. B	
62/44	254	38	1.12	43	-18	59	21	40.2	12	3.84	1.22	3.47	29.4	Nonbank fin. B	
24/18	202	17	5.46	94	10	45	43	64.7	12	1.31	1.33	1.44	1.4	Conglomerates	
54/37	173	NM	4.26	DEF	12	48	19	58.6	12	4.03	-0.92	4.04	3.5	Chemicals	
43/24	84	NA	0.00	0	12	NA	30	3.7	12	0.07	NA	NA	NM	Manufacturing D	
38/22	NEG	21	0.00	0	15	74	35	96.2	12	1.32	1.30	1.65	2.4	Publishing/TV A	
14/4	97	NM	0.00	0	127	53	74	139.1	12	-1.84	-2.35	0.43	76.7	Banks A	
37/25	305	17	3.17	53	46	81	28	81.5	12	2.01	2.08	2.32	3.9	Services D	
67/30	398	55	0.00	0	33	80	20	366.5	12	-1.70	0.87d	1.43	8.4	Health care B	
40/26	200	16	3.16	50	43	63	26	62.6	12	2.03	2.42	2.71	8.1	Containers A	
29/22	187	13	5.64	72	35	20	34	44.5	12	2.13	2.23	2.38	2.9	Utilities A	
48/39	144	12	6.49	76	21	28	22	41.9	12	3.45	3.86	3.70	2.4	Utilities A	
46/12	246	17	1.37	23	191	80	30	251.8	02	1.13	1.88d	3.25	5.5	Nonbank fin. A	
79/16	509	9	0.21	2	345	51	12	301.6	12	2.72b	8.43	5.90	16.3	Nonbank fin. B	
45/20	432	27	0.00	0	12	57	23	240.9	09	1.52	1.54	1.97	6.6	Office equipment C	
64/46	240	13	4.38	57	-16	47	21	27.2	12	3.80	3.53	2.68	8.2	Nonbank fin. B	
79/47	344	47	0.00	0	-5	95	19	481.3	12	0.24	1.06d	0.08	1025.0	Health care B	
26/16	136	11	4.31	48	55	44	40	34.7	12	2.17	2.17	2.39	4.6	Banks C	
70/59	77	14	0.00	0	9	69	15	107.6	12	2.49	4.87	2.00	NM	Nonbank fin. A	
25/19	127	12	7.21	84	18	30	42	41.3	12	1.60	1.96	2.05	2.9	Utilities A	
58/40	128	10	5.03	51	40	52	18	60.7	12	4.38	5.24d	5.18	9.8	Nonbank fin. B	
46/13	115	NM	0.00	0	-57	59	51	168.3	12	2.21	-15.72	1.72	34.9	Utilities B	
66/34	190	NM	0.31	DEF	52	52	15	81.6	12	-14.47	-4.96	2.53	37.6	Automotive B	
30/16	250	28	0.00	0	57	72	34	102.3	12	0.90	1.00	1.51	6.0	Leisure C	
26/12	150	10	3.63	37	76	36	44	61.4	12	1.71	2.13	2.32	1.3	Banks C	
17/10	144	23	4.15	93	31	75	56	67.3	08	0.85	0.75	0.90	5.6	Automotive B	
29/19	569	25	1.52	38	31	39	36	4.9	12	0.91	1.05	1.20	4.2	Nonbank fin. A	
30/23	150	14	6.97	99	22	23	35	58.5	12	2.25	1.91	2.48	5.6	Utilities A	

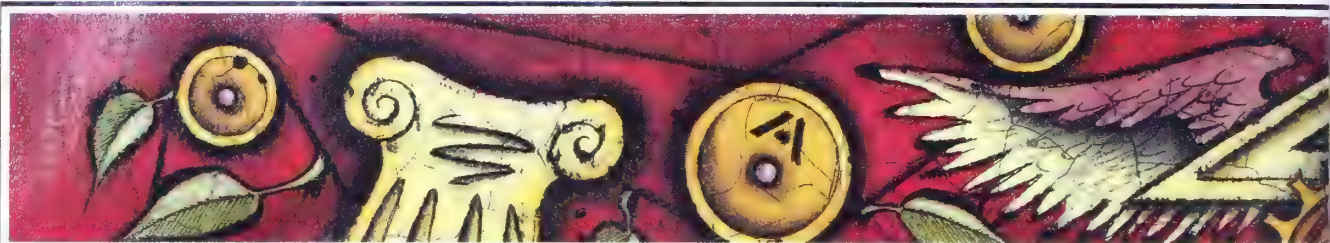


RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %
646	MANOR CARE	940	653	868	15	37.2	24	4.3	4.0	9.3	13.9	950	1
647	CROMPTON & KNOWLES	940	733	450	15	35.9	20	8.0	7.7	21.1	27.0	309	9
648	NAVISTAR INTERNATIONAL	938	554	3520	-8	-159.0	NM	NM	NM	NM	-56.6	3443	-9
649	PACIFIC TELECOM	938	490	724	6	89.5	-6	12.4	14.0	12.3	15.1	1686	-2
650	PAINWEBBER GROUP	932	820	3166y	6	150.7	NM	4.8	NM	NA	19.8	20399	9
651	BOWATER	931	610	1289	-7	45.6	-48	3.5	6.3	4.2	4.3	2780	21
652	NEW PLAN REALTY TRUST	926	708	60y	9	43.2	22	71.8	64.4	NM	9.9	458	50
653	WELLMAN	923	667	806	-3	45.3	-26	5.6	7.4	8.7	10.9	865	-3
654	CADENCE DESIGN SYSTEMS	923	548	392	1	-21.7	NM	NM	NM	NM	-11.8	350	2
655	AVNET	922	534	1694	-4	51.2	-10	3.0	3.2	5.9	6.3	1175	0
656	UNIVERSAL	920	857	2907y	4	70.2	79	2.4	1.4	23.0	24.1	1318	-7
657	NORDSON	918	859	392	10	34.7	19	8.8	8.2	22.2	21.4	308	15
658	KU ENERGY	917	646	588	6	83.6	4	14.2	14.5	10.7	14.2	1426	0
659	FLEETWOOD ENTERPRISES	916	772	1514	4	38.6	6	2.6	2.5	7.0	8.4	934	16
660	HARSCO	908	705	1943	10	76.5	6	3.9	4.1	14.8	16.0	1060	7
661	J.M. SMUCKER	908	717	480	7	33.4	7	7.0	7.0	16.0	16.1	263	10
662	NOVACARE	905	873	230	49	26.4	57	11.5	10.9	18.4	18.9	178	63
663	MINNESOTA POWER	903	607	484	1	75.5	1	15.6	15.6	10.7	15.1	1547	1
664	CIPSCO	900	643	722	3	77.5	9	10.7	10.2	8.8	11.8	1754	2
665	PEOPLES ENERGY	899	656	1118	3	72.1	24	6.4	5.3	9.6	12.3	1642	1
666	SYMANTEC	897	917	184	67	16.9	178	9.2	5.5	NA	34.4	93	65
667	FIRST ALABAMA BANCSHARES	896	654	659	8	78.3	14	11.9	11.2	NA	13.7	6745	6
668	YORK INTERNATIONAL	896	NR	1653	14	13.0	219	0.8	0.3	6.8	929.7	1206	18
669	OLD REPUBLIC INTERNATIONAL	894	756	1344a	8	120.1	16	8.9	8.4	10.8	15.0	3712	12
670	WILMINGTON TRUST	890	661	429	0	71.9	7	16.7	15.7	27.2	20.8	4061	6
671	PSI RESOURCES	888	568	1122	1	29.2	-77	2.6	11.5	4.9	2.7	2054	0
672	INTERGRAPH	882	488	1195	14	71.1	14	5.9	6.0	9.7	9.9	997	10
673	IDAHO POWER	879	579	483	4	57.9	-16	12.0	14.9	7.7	9.1	1774	6
674	UNITED INVESTORS MANAGEMENT	879	682	311y	20	66.8	12	21.5	23.0	13.4	15.5	1240	27
675	TOSCO	878	693	1980	-8	75.4	-39	3.8	5.7	15.3	18.6	970	2
676	SERVICE MERCHANDISE	876	865	3400	-1	76.1	25	2.2	1.8	18.0	499.3	1807	-1
677	YELLOW FREIGHT SYSTEM	874	601	2344	2	26.7	-59	1.1	2.8	5.8	5.6	1098	-2
678	CAESARS WORLD	868	885	951	7	77.6	116	8.2	4.1	17.2	23.0	897	0
679	CALGON CARBON	866	525	308	8	38.1	-4	12.4	13.9	16.0	17.4	305	21
680	GEORGIA GULF	864	810	838	-10	61.5	-36	7.3	10.2	50.4	NM	416	-9
681	BOISE CASCADE	863	542	3950	-6	-79.5	NM	NM	1.8	NM	-8.1	4729	-1
682	INTEGRA FINANCIAL	862	886	802	8	70.2	169	8.8	3.5	15.4	12.6	8847	16
683	ENQUIRER/STAR GROUP	861	NR	276	29	4.0	507	1.4	0.3	2.1	1.6	777	-3
684	DELL COMPUTER	861	832	890a	63	50.9	87	5.7	5.0	18.8	19.9	470	111
685	HAWAIIAN ELECTRIC INDUSTRIES	859	668	1084	7	61.7	22	5.7	5.0	6.7	9.6	3905	6
686	ALEXANDER & ALEXANDER SERVICES	859	530	1369	2	-10.4	NM	NM	4.1	NM	-2.6	2765	-2
687	CYPRUS MINERALS	859	595	1679	-10	42.7	-62	2.5	5.9	3.8	2.5	1966	2
688	UNIVERSAL FOODS	856	577	843	4	58.0	15	6.9	6.2	14.6	19.0	682	14
689	BIOGEN	854	565	61	23	7.2	-7	11.7	15.4	4.7	3.0	165	8
690	JOHN H. HARLAND	850	609	379	2	49.8	-13	13.2	15.4	NA	15.6	352	1

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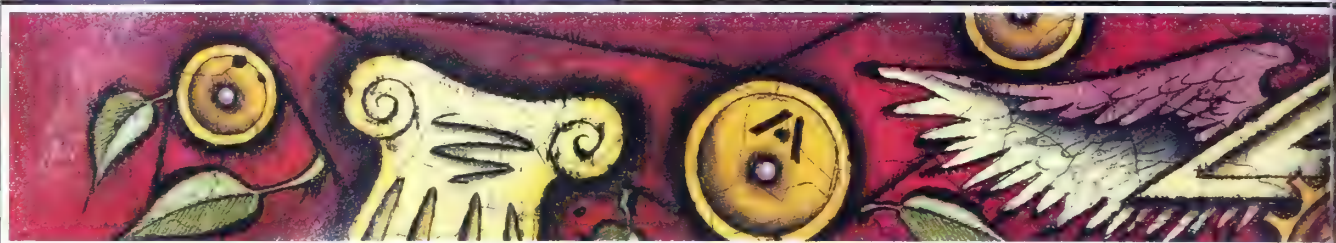
RANK	RATIOS			DIVIDENDS		SHARES			FY	EARNINGS PER SHARE				INDUSTRY GROUP	
	12 MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT- M.L.		TURN OVER %	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST \$		VARI- ATION %
29/17	352	22		0.54	12	19	51	38	55.9	05	0.84	1.11d	1.34	7.5	Health care C
48/24	708	27		1.32	36	60	52	24	42.3	12	1.22	1.46	1.75	2.3	Chemicals
4/2	283	NM		0.00	0	14	45	250	53.9	10	-0.16	-0.77	0.17	123.5	Automotive A
34/23	158	10		5.31	56	-17	9	39	7.2	12	2.46	2.27	2.57	13.2	Telecomms. A
27/13	144	7		1.72	13	98	51	40	151.3	12	-2.15	3.15	2.59	13.5	Nonbank fin. A
30/19	98	23		4.64	104	13	67	36	88.3	12	2.30	1.15	0.36	127.8	Paper B
25/18	212	20		5.92	116	36	17	45	23.1	07	1.01	1.05	1.09	8.3	Housing B
30/19	221	21		0.42	9	31	76	32	113.2	12	1.90	1.39	1.84	8.2	Chemicals
35/15	500	NM		0.00	0	-11	58	42	136.1	12	1.19	-0.56	1.21	7.4	Office equipment C
30/23	113	15		2.31	35	-5	86	35	53.8	06	1.57	1.72	1.57	8.9	Services B
34/14	315	16		2.86	47	115	59	33	72.9	06	1.11	1.72	2.09	3.8	Consumer E
53/24	566	27		0.94	25	94	20	20	25.7	10	1.53	1.77	1.99	3.0	Manufacturing C
28/20	161	11		6.43	73	24	22	38	35.6	12	1.97	2.13	2.10	4.8	Utilities A
43/23	200	21		2.19	46	67	66	23	92.1	04	1.37	1.91d	2.70	8.9	Leisure D
40/24	189	12		3.81	45	43	55	26	52.1	12	2.77	2.91	3.25	12.6	Manufacturing A
39/20	439	26		1.24	32	42	23	30	20.7	04	1.08	1.19d	1.36	2.2	Food B
30/14	647	37		0.00	0	67	66	38	152.7	06	0.44	0.64	0.84	4.8	Health care C
33/26	191	12		6.33	79	19	17	29	30.1	12	2.37	2.46	2.25	6.2	Utilities A
28/22	148	13		7.13	89	25	34	34	38.9	12	1.92	2.11	2.18	1.8	Utilities A
28/22	157	13		6.65	84	22	37	35	27.9	09	2.07	2.05	2.33	4.7	Utilities B
51/20	1825	44		0.00	0	102	76	22	264.5	03	0.47	0.94d	1.29	3.9	Office equipment C
31/22	156	11		3.54	40	26	40	33	57.3	12	2.10	2.38	2.64	1.9	Banks C
36/23	NM	55		0.03	2	NA	16	29	NA	12	0.24	0.56	2.10	NM	Housing A
41/24	105	8		1.94	15	64	59	23	30.9	12	4.03	4.95	4.52	3.3	Nonbank fin. B
59/39	257	12		3.28	40	32	26	18	41.9	12	3.80	4.07	4.46	1.1	Banks A
19/15	128	46		6.15	286	-2	64	55	83.2	12	2.20	0.35	1.77	4.5	Utilities A
32/16	123	13		0.00	0	-14	55	48	230.0	12	1.28	1.47	1.59	5.7	Office equipment C
29/24	152	17		7.19	119	6	29	34	20.5	12	1.91	1.56	2.09	8.1	Utilities A
25/17	204	13		1.30	17	33	NA	38	4.0	12	1.57	1.76	2.02	5.4	Nonbank fin. A
31/18	228	13		2.04	26	51	39	30	116.0	12	3.94b	2.35	2.98	30.9	Fuel B
15/7	5751	12		0.00	0	120	66	66	101.2	12	0.93	1.14	1.40	4.3	Retailing
34/24	184	33		3.02	99	6	72	28	119.2	12	2.31	0.95	1.87	18.2	Transportation D
40/17	257	17		0.00	0	104	78	24	169.6	07	1.52	2.09	2.91	9.6	Leisure C
31/18	396	23		0.75	17	-8	44	41	80.9	12	0.98	0.94	1.08	4.6	Services C
29/14	NEG	15		0.00	0	69	49	34	178.1	12	3.07	1.75	2.05	12.2	Chemicals
29/18	75	NM		2.64	DEF	-2	60	38	85.3	12	1.62	-2.46	-2.13	50.7	Paper A
37/18	155	12		3.61	44	82	40	24	38.4	12	1.06	2.89	3.36	3.3	Banks A
22/14	288	45		0.20	9	NA	30	42	NA	03	-1.57	0.46d	1.07	8.4	Publishing/TV B
36/20	336	17		0.00	0	38	37	24	726.9	01	1.36	2.11	2.40	4.6	Office equipment B
38/31	150	15		6.22	93	18	21	24	28.3	12	2.02	2.40	2.73	5.1	Utilities A
28/18	213	NM		4.76	DEF	-19	67	41	54.2	12	1.35	-0.25	1.11	14.4	Nonbank fin. A
25/18	76	31		3.64	111	5	62	39	87.5	12	2.38	0.72	0.92	83.7	Metals C
40/29	281	15		2.63	39	-4	55	27	46.4	09	1.95	2.18	2.34	2.1	Food B
49/25	560	NM		0.00	0	-14	66	31	396.4	12	0.07	0.15	0.31	45.2	Health care B
25/21	266	17		3.87	67	7	60	37	46.6	12	1.52	1.34	1.69	2.4	Office equipment A



RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %
691	FIRST HAWAIIAN	850	624	578	7	81.7	14	14.1	13.2	16.3	16.4	6511	18
692	FIRST EMPIRE STATE	848	900	851	19	67.2	25	7.9	7.6	16.1	13.0	9171	19
693	LAFARGE	843	665	1569	-11	-50.4	NM	NM	2.4	NA	-5.8	1836	-2
694	WASHINGTON FEDERAL SAVINGS & LOAN	839	NR	283y	0	73.8	17	26.1	22.2	11.2	19.3	2935	11
695	STAR BANC	838	703	659	-1	65.8	1	10.0	9.8	NA	12.1	6646	6
696	STEWART & STEVENSON SERVICES	832	759	669a	0	32.1	3	4.8	4.7	14.7	15.7	406	12
697	FIRST VIRGINIA BANKS	832	758	588	3	69.6	7	11.8	11.4	NA	13.2	6119	14
698	OGDEN PROJECTS	832	626	364	-1	52.6	46	14.4	9.8	6.9	20.9	2020	8
699	MARQUETTE ELECTRONICS	829	NR	221	NA	12.0	NA	5.4	NA	11.3	13.4	174	8
700	TRANSATLANTIC HOLDINGS	829	640	623	7	70.5	14	11.3	10.7	14.8	14.8	2204	11
701	LONGVIEW FIBRE	827	719	644	-4	19.1	-62	3.0	7.4	4.9	5.1	920	6
702	CRANE	826	597	1303	-9	45.0	-28	3.5	4.4	12.5	13.6	664	-7
703	INTELLIGENT ELECTRONICS	822	740	2173	42	38.6	15	1.8	2.2	14.1	14.1	707	60
704	WPL HOLDINGS	822	691	649	5	68.7	9	10.6	10.2	10.5	14.2	1376	9
705	COMMERCE CLEARING HOUSE	819	578	704	-2	31.0	-24	4.4	5.7	13.2	13.7	626	2
706	BOB EVANS FARMS	818	750	540	9	37.9	19	7.0	6.4	14.6	14.7	309	12
707	BROOKLYN UNION GAS	817	672	1005	5	65.5	11	6.5	6.2	6.8	9.7	1828	16
708	KEYSTONE INTERNATIONAL	814	515	521	17	22.8	-48	4.4	9.9	9.2	9.4	427	4
709	CONTINENTAL BANK	813	722	2301	-25	-73.0	NM	NM	2.9	NA	-9.7	24008	-12
710	UJB FINANCIAL	809	895	1255	-7	22.4	NM	1.8	NM	NM	2.6	13378	4
711	USAIR GROUP	808	544	6514	-1	-305.3	NM	NM	NM	NM	-31.6	6683	4
712	SIGNET BANKING	807	955	1305	-9	-25.7	NM	NM	2.9	NA	-3.6	11239	-1
713	ROLLINS ENVIRONMENTAL SERVICES	805	679	223	8	25.9	-7	11.7	13.5	13.9	14.1	261	10
714	COMMUNICATIONS SATELLITE	795	815	523	14	71.4	NM	13.7	NM	8.0	12.2	1393	13
715	EDISON BROTHERS STORES	791	711	1367a	14	61.3	1	4.5	5.0	13.9	17.0	843	10
716	CENTRAL FIDELITY BANKS	791	964	639	6	60.4	8	9.5	9.2	21.9	14.5	6806	10
717	CENTEX	790	782	2155y	-6	29.4	-47	1.4	2.4	7.4	5.9	2011	-5
718	CRESTAR FINANCIAL	790	741	1213	-4	33.8	-45	2.8	4.8	13.2	4.2	11828	0
719	HEALTHCARE COMPARE	790	NR	71	68	12.8	131	18.0	13.1	23.8	23.8	70	34
720	HEALTHSOUTH REHABILITATION	789	921	225	25	22.4	73	9.9	7.2	7.8	8.3	472	57
721	MERCANTILE BANKSHARES	786	707	512	4	NA	NA	NA	14.3	NA	13.5	5183	6
722	KANSAS CITY SOUTHERN INDUSTRIES	785	864	610y	16	45.7	10	7.5	7.8	9.6	11.5	1114	13
723	LOUISIANA LAND & EXPLORATION	785	487	825y	-6	20.9	-62	2.5	6.3	NA	4.7	1222	3
724	NATIONAL FUEL GAS	785	676	875	1	54.8	12	6.3	5.6	9.5	9.8	1680	9
725	WASHINGTON WATER POWER	784	683	567	2	70.6	-2	12.5	13.0	8.1	11.5	1522	8
726	MENTOR GRAPHICS	783	684	400	8	-61.6	NM	NM	5.4	NM	-23.0	446	-12
727	MAXUS ENERGY	783	574	791	15	-11.2	NM	NM	1.1	-1.9	NM	1452	-1
728	FERRO	782	861	1057	-6	4.8	-75	0.5	1.7	1.7	NA	672	-2
729	HANOVER INSURANCE	779	753	1809a	6	49.1	5	2.7	2.7	NA	5.8	3488	11
730	ALLEGHANY	777	748	1417	16	21.7	-67	1.5	5.3	4.0	3.1	4539	7
731	VARIAN ASSOCIATES	774	628	1366	5	52.7	214	3.9	1.3	11.3	12.3	875	-3
732	LANCE	774	652	450	1	37.7	-18	8.4	10.3	15.9	15.9	300	3
733	EMSERCH	774	462	2835	1	19.1	-77	0.7	2.9	5.3	0.7	3166	0
734	APPLIED MATERIALS	773	809	661	15	28.4	4	4.3	4.7	8.3	8.4	674	18
735	EQUITABLE RESOURCES	772	649	680	3	64.2	9	9.4	8.9	10.5	11.7	1375	17



RATINGS	12 MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	DIVIDENDS		SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
				YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT MIL	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST. \$	VARI- ATION %
31/23	171	10	3.92	41	18	33	32	39.3	12	2.45	2.55	2.84	2.5	Banks D
130/63	171	14	1.27	17	106	38	7	23.6	12	7.91	9.32	10.97	1.7	Banks A
16/10	96	NM	2.02	DEF	3	14	57	15.1	12	0.97	-0.90	0.52	55.8	Housing A
28/19	219	12	3.12	38	32	39	33	61.8	09	1.91	2.11	2.43	2.9	Nonbank fin. C
29/20	156	13	3.45	45	23	37	29	21.0	12	2.23	2.24	2.38	1.3	Banks B
67/33	405	24	0.58	14	52	63	15	222.7	01	1.97	2.35d	2.81	5.0	Manufacturing C
40/27	158	12	3.60	43	47	29	21	24.3	12	3.05	3.25	3.48	2.6	Banks C
26/19	331	16	0.00	0	10	6	38	22.8	12	0.99	1.40	1.39	2.9	Utilities A
24/18	930	NA	0.00	0	NA	2	42	NA	04	0.64	NA	NA	NM	Health care D
40/29	174	12	0.66	8	20	43	23	20.6	12	2.71	3.09	3.24	4.3	Nonbank fin. B
17/10	220	50	2.50	125	34	31	52	39.4	10	1.13	0.32	0.81	14.8	Containers B
30/20	249	NA	2.86	NA	19	48	31	47.8	12	1.94b	NA d	1.89	5.3	Manufacturing A
30/9	300	21	0.00	0	64	65	36	604.2	10	1.05	1.11	1.30	5.4	Office equipment A
33/24	180	13	6.05	77	30	14	27	20.9	12	2.23	2.43	2.33	3.0	Utilities A
27/16	362	26	2.98	79	-8	34	35	29.4	12	1.15	0.89	0.98	7.1	Publishing/TV B
28/17	319	21	1.07	23	54	33	31	90.8	04	1.07	1.23d	1.39	3.6	Leisure A
31/27	129	13	6.72	89	10	29	28	30.8	09	2.14	2.18	2.40	2.5	Utilities B
35/23	335	37	2.65	97	-19	55	34	79.3	12	1.31	0.66	1.30	3.8	Manufacturing A
17/8	72	NM	3.97	DEF	39	41	54	148.9	12	0.95	-2.03	1.82	20.9	Banks B
19/9	103	39	3.40	133	118	30	46	45.8	12	-0.17	0.45	1.08	15.7	Banks A
25/7	73	NM	0.00	0	-18	60	46	195.4	12	-10.89	-7.62	-2.12	81.1	Transportation A
31/12	113	NM	2.68	DEF	133	26	27	75.9	12	1.56	-0.95	2.80	15.0	Banks C
14/8	436	31	0.67	21	16	39	60	95.9	09	0.46	0.43	0.52	5.8	Services C
42/25	133	11	3.35	37	54	76	19	82.5	12	-0.87	3.75	3.28	2.7	Telecomms. A
45/28	219	13	3.05	38	25	49	22	49.6	01	2.78	2.94d	3.49	7.7	Retailing
39/18	189	13	3.09	40	110	34	22	46.2	12	2.47	2.80	3.08	2.3	Banks C
55/33	160	24	0.76	18	53	77	15	97.3	03	2.83	2.19d	3.29	11.9	Housing B
26/15	105	25	3.27	82	49	39	32	89.7	12	1.87	0.98	1.60	13.1	Banks C
44/12	1475	67	0.00	0	203	58	24	272.1	12	0.23	0.50	0.80	6.3	Nonbank fin. A
37/18	294	33	0.00	0	45	94	28	81.7	12	0.71	0.86	1.08	6.5	Health care C
29/22	148	11	3.31	37	24	38	30	31.4	12	2.32	2.34	2.50	2.4	Banks A
75/42	199	17	1.60	28	77	47	10	68.5	12	3.95	4.31	4.73	7.2	Transportation B
44/25	176	38	3.60	135	-32	72	28	66.2	12	1.94	0.74	0.87	40.2	Fuel B
26/22	140	16	5.78	90	16	22	31	22.6	09	1.83	1.63	1.90	5.8	Utilities B
34/30	147	13	7.57	95	19	12	24	35.4	12	2.78	2.61	2.80	1.1	Utilities A
22/12	293	NM	1.33	DEF	23	74	44	235.5	12	0.53	-1.43	0.51	25.5	Office equipment C
11/6	NEG	NM	0.00	0	-14	59	103	131.6	12	-0.38	-0.52	0.39	94.9	Fuel B
45/22	333	NM	1.56	800	91	58	19	116.8	12	0.83	0.08	2.45	7.3	Chemicals
43/27	93	16	1.17	19	28	80	21	20.6	12	2.58	2.36	2.06	27.2	Nonbank fin. B
122/91	112	36	0.00	0	33	55	6	10.4	12	10.43	3.40	8.65	NM	Nonbank fin. A
50/31	180	14	0.79	11	4	79	19	142.2	09	0.64	2.95	2.84	6.0	Electrical B
28/21	325	20	3.56	73	8	35	31	37.3	12	1.46	1.21	1.41	5.7	Food B
21/10	111	NM	6.74	1143	-34	73	65	69.0	12	1.03	0.07	0.62	50.0	Utilities B
47/23	229	30	0.00	0	47	78	17	322.7	10	2.00	1.52	2.06	6.8	Manufacturing C
42/35	141	12	4.16	50	8	56	21	36.5	12	2.82	3.08	3.10	6.5	Utilities B



RANK	COMPANY	MARKET VALUE		SALES	CHANGE FROM PREV.	PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS END \$ MIL.		12 MONTHS END \$ MIL.	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL	ON COMMON EQUITY	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	
736	DIEBOLD	771	814	506	6	35.7	32	7.1	5.7	9.1	9.3	536	3
737	ROUSE	771	556	574y	8	2.4	NM	0.4	NM	NM	NM	2622	8
738	USF&G	769	630	4172	-5	-144.0	NM	NM	NM	NM	-22.7	14456	4
739	TIMKEN	766	631	1647	-3	-35.7	NM	NM	3.2	NM	-3.5	1759	-3
740	KAISER ALUMINUM	766	NR	2001	-5	108.4	-49	5.4	10.2	14.7	20.4	2085	NA
741	SOTHEBY'S HOLDINGS	766	651	251a	-46	22.3	-83	8.9	27.8	NA	9.8	556	-15
742	LEGGETT & PLATT	759	775	1082	-1	39.4	34	3.6	2.7	9.4	12.2	656	-3
743	TOPPS	757	641	286	-1	55.5	9	19.4	17.6	115.7	124.9	129	9
744	FIRST SECURITY	756	927	707	1	59.6	30	8.4	6.5	NA	10.5	7015	8
745	TIFFANY	753	663	492	8	31.8	-13	6.5	8.0	13.1	16.5	395	29
746	JACOBS ENGINEERING GROUP	752	920	1026	10	21.4	35	2.1	1.7	18.8	18.8	277	3
747	CONTINENTAL MEDICAL SYSTEMS	751	NR	491	65	22.6	64	4.6	4.6	12.2	10.8	381	50
748	CENTURY COMMUNICATIONS	749	731	294	15	-80.6	NM	NM	NM	NM	NM	1333	9
749	QUALITY FOOD CENTERS	746	825	395	14	20.6	30	5.2	4.6	27.9	25.5	116	25
750	IBP	745	493	10388	2	1.4	-97	0.0	0.5	3.7	0.3	1450	-5
751	VANGUARD CELLULAR SYSTEMS	742	837	69	8	-32.7	NM	NM	NM	NM	-63.3	256	8
752	WAUSAU PAPER MILLS	742	NR	357	4	34.7	71	9.7	5.9	23.5	24.7	237	8
753	PORTLAND GENERAL	742	618	890	4	-7.8	NM	NM	13.3	2.4	-2.8	2726	6
754	AMETEK	742	806	715	8	38.0	2	5.3	5.7	NA	18.7	597	-3
755	TOOTSIE ROLL INDUSTRIES	741	878	208	7	26.5	18	12.8	11.6	17.8	17.8	183	10
756	QUESTAR	741	671	632	18	64.0	11	10.1	10.7	10.6	13.3	1220	6
757	PUBLIC SERVICE CO. OF NEW HAMPSHIRE	740	NR	746a	13	-73.7	NM	NM	NM	NM	-11.7	2610	6
758	BRIGGS & STRATTON	738	896	971	-3	43.9	5	4.5	4.2	14.1	15.2	659	2
759	AFFILIATED PUBLICATIONS	738	677	393	-27	-66.9	NM	NM	4.5	NM	-32.4	493	-3
760	ATLANTA GAS LIGHT	735	678	969	1	46.7	-3	4.8	5.0	9.7	9.9	1481	4
761	FINGERHUT	733	818	1428	14	53.6	12	3.8	3.8	15.1	15.7	737	37
762	FIRST TENNESSEE NATIONAL	732	933	756	2	63.8	33	8.4	6.5	19.3	14.9	7904	18
763	HOME SHOPPING NETWORK	732	855	1079	3	-8.5	NM	NM	2.8	-8.5	-4.8	583	3
764	CABOT	731	621	1467	-7	42.7	6	2.9	2.6	7.3	10.0	1571	-14
765	ROCHESTER GAS & ELECTRIC	730	738	853	3	58.0	-3	6.8	7.2	7.6	8.6	1954	5
766	GENSIA PHARMACEUTICALS	730	NR	5a	NA	-25.1	NA	NM	NA	NM	-47.9	65	54
767	MIRAGE RESORTS	728	899	894a	17	27.0	-3	3.0	3.7	9.9	9.3	1280	6
768	SPIEGEL	728	541	1976	-1	16.9	-73	0.9	3.1	4.6	3.8	1725	-1
769	EXABYTE	727	875	234	37	32.2	17	13.8	16.2	32.2	32.3	150	49
770	JWP	723	622	3594	27	60.3	2	1.7	2.1	10.8	13.9	2281	54
771	VALSPAR	723	918	642	11	29.3	14	4.6	4.4	17.9	19.5	310	2
772	BANPONCE	722	826	927	46	64.6	2	7.0	10.0	NA	10.5	8780	-2
773	ACUSON	722	481	336	19	58.5	22	17.4	16.9	21.5	21.5	336	35
774	LONGS DRUG STORES	721	655	2366	1	55.4	-7	2.3	2.6	13.0	13.6	659	5
775	SENSORMATIC ELECTRONICS	717	892	274	29	27.8	28	10.1	10.2	7.3	11.6	435	52
776	ADOLPH COORS	716	603	1917	4	23.9	-39	1.2	2.1	NA	2.1	1952	16
777	IMMUNEX	715	698	53	71	0.8	NM	1.5	NM	NM	0.4	254	110
778	ARGONAUT GROUP	715	699	517	-15	84.4	-6	16.3	14.7	15.2	15.2	1946	-1
779	TECUMSEH PRODUCTS	711	834	1197	-9	42.5	199	3.6	1.1	6.4	6.1	1056	0
780	AMAX GOLD	711	606	128	-14	21.2	-25	16.5	18.9	15.2	15.4	198	26



RATINGS	DIVIDENDS										SHARES				EARNINGS PER SHARE				INDUSTRY GROUP
	12 MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INSTI- TUTIONS HOLDING %	SHRS OUT. MIL.	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES						
													1992 EST. \$	VARI- ATION %					
61/38	201	21	2.90	62	56	77	13	59.5	12	12	2.05	2.70	2.94	5.1	Office equipment A				
22/14	NEG	NM	3.75	1200	1	43	48	51.7	12	12	-0.07	0.05	1.34	9.0	Housing B				
13/6	96	NM	2.19	DEF	4	24	84	121.2	12	12	-5.71	-2.15	0.84	67.9	Nonbank fin. B				
30/21	75	NM	3.90	DEF	3	56	30	40.5	12	12	1.85	-1.21	0.84	23.8	Manufacturing C				
15/9	144	7	0.37	2	NA	13	57	NA	12	12	4.27	2.03	0.69	71.0	Metals A				
15/10	339	47	4.00	188	10	21	51	39.8	12	12	1.66	0.32d	0.75	57.3	Services E				
48/28	234	19	2.05	40	40	55	18	41.9	12	12	1.67	2.22	2.67	5.2	Consumer B				
20/12	1705	14	1.50	21	5	30	47	172.4	02	02	1.15	1.15d	1.32	3.8	Publishing/TV B				
35/18	133	12	2.97	37	75	51	24	50.5	12	12	2.03b	2.51	2.88	2.4	Banks D				
58/41	392	24	0.58	14	3	61	16	121.8	01	01	2.34	2.01	2.49	6.4	Retailing				
37/17	661	38	0.00	0	70	36	23	54.4	09	09	0.64	0.86	1.06	4.7	Services A				
30/13	360	38	0.00	0	60	59	34	93.6	06	06	0.41	0.59	0.78	7.7	Health care C				
13/7	NEG	NM	0.00	0	37	16	73	8.0	05	05	-1.10	-1.00d	-1.03	NM	Publishing/TV A				
42/25	922	37	0.00	0	55	27	19	68.8	12	12	0.83	1.06	1.27	3.2	Food C				
26/13	154	NM	3.81	2000	-32	51	47	145.2	12	12	1.01	0.03	1.14	10.5	Food B				
33/18	1437	NM	0.00	0	34	39	25	123.5	12	12	-1.42	-1.44	0.91	34.1	Telecomms. A				
57/19	529	24	0.69	17	161	42	15	79.4	08	08	1.05	2.01	2.46	2.0	Paper B				
19/13	102	NM	7.50	DEF	-3	38	46	49.8	12	12	2.17	-0.43	1.51	13.2	Utilities A				
17/12	365	19	4.03	78	47	46	44	33.1	12	12	0.85	0.87	1.02	2.9	Electrical C				
82/43	496	28	0.35	10	65	25	10	13.7	12	12	2.27	2.67	3.00	NM	Food B				
25/18	155	12	5.40	63	7	67	39	44.5	12	12	1.46	1.63	1.68	6.0	Utilities B				
55/17	110	NM	0.00	0	-57	35	37	60.3	12	12	-73.46	-1.41d	0.00	NM	Utilities A				
53/27	256	20	3.14	64	74	75	14	77.2	06	06	2.45	2.52	3.20	13.8	Manufacturing C				
12/8	357	NM	2.29	DEF	2	47	70	42.1	12	12	0.35	-0.95	0.28	21.4	Publishing/TV B				
38/30	159	15	6.63	99	11	21	24	25.5	09	09	2.02	2.07	2.29	3.9	Utilities B				
36/21	215	15	1.01	15	59	84	23	71.5	12	12	1.96	2.14	2.46	2.4	Retailing				
49/24	171	11	3.89	45	102	44	16	109.5	12	12	3.01	4.04	4.57	2.4	Banks C				
9/4	412	NM	0.00	0	74	24	87	68.1	08	08	0.35	-0.11	0.40	NM	Retailing				
40/28	187	24	2.59	62	24	60	18	30.5	09	09	2.73	1.69	2.80	4.3	Chemicals				
24/19	124	14	7.38	105	19	40	32	37.9	12	12	1.72	1.60	1.99	6.0	Utilities A				
47/9	1390	NM	0.00	0	280	49	19	440.4	12	12	-0.80	-1.21d	0.87	8.0	Health care B				
37/22	251	16	0.00	0	43	47	22	156.5	12	12	1.57	2.07d	2.67	8.2	Leisure C				
21/11	164	42	2.57	109	-6	8	52	19.0	12	12	1.18	0.33	0.89	13.5	Retailing				
41/13	729	24	0.00	0	97	67	20	461.2	12	12	1.32	1.51	1.94	6.2	Office equipment C				
23/13	166	12	0.00	0	-15	54	40	118.7	12	12	1.56	1.54	1.71	1.8	Services E				
70/38	482	26	1.08	28	83	64	11	22.5	10	10	2.45	2.53	3.06	2.0	Housing A				
26/17	117	11	3.33	37	50	21	30	29.6	12	12	3.15	2.15	NA	NM	Banks C				
40/20	265	13	0.00	0	-44	62	35	141.4	12	12	1.33	1.59	1.59	8.8	Health care D				
44/33	177	13	3.06	40	1	38	20	34.1	01	01	2.94	2.71	3.01	6.0	Health care A				
31/15	301	24	1.15	28	65	71	28	128.2	05	05	0.90	1.09d	1.33	1.5	Electrical B				
24/17	64	30	2.61	78	-7	27	37	95.6	12	12	1.05	0.64	1.47	12.2	Consumer C				
68/37	337	NM	0.00	0	10	69	15	783.8	12	12	-1.10	0.05	0.44	59.1	Health care B				
33/22	129	9	2.52	22	8	27	26	21.8	12	12	3.25	3.16	3.17	3.8	Nonbank fin. B				
130/86	102	17	2.46	41	47	78	5	21.3	12	12	2.59	7.77	13.50	NM	Housing A				
16/10	516	28	0.82	23	-20	9	73	13.8	12	12	0.47	0.35	0.28	50.0	Metals C				



RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %
781	VALLEY NATIONAL	710	941	1132	-1	34.6	361	3.1	0.7	8.5	6.6	10652	
782	JONES APPAREL GROUP	710	NR	334	16	30.8	65	9.2	6.5	38.8	42.8	123	NA
783	ASSOCIATED COMMUNICATIONS	709	791	43a	28	-8.7	NM	NM	30.9	NA	-30.4	67	
784	MICRON TECHNOLOGY	709	743	457	32	15.0	NM	3.3	NM	3.4	3.0	710	
785	AMERICAN WATER WORKS	708	767	633	11	76.4	28	12.1	10.5	9.2	12.4	2241	
786	AMERICAN POWER CONVERSION	708	NR	94	58	15.6	67	16.7	15.8	39.5	42.2	58	6
787	FEDERAL SIGNAL	707	788	467	6	31.0	11	6.6	6.4	19.3	18.8	341	1
788	ROLLINS	705	784	476	9	31.5	15	6.6	6.3	30.0	30.0	205	1
789	MERCANTILE BANCORPORATION	704	891	776	2	66.6	17	8.6	7.5	15.0	12.2	8089	
790	PUGET SOUND BANCORP	702	947	500	3	49.1	6	9.8	9.5	15.2	14.7	4884	
791	MNC FINANCIAL	699	994	2194	-32	-70.2	NM	NM	NM	NM	-7.1	17438	-3
792	COMMERCE BANCSHARES	698	880	594	-1	59.8	4	10.1	9.6	NA	11.8	6765	
793	AUTODESK	694	444	285	20	57.8	2	20.3	23.9	NA	21.9	328	28
794	J.B. HUNT TRANSPORT SERVICES	694	845	733	26	29.5	-2	4.0	5.2	9.4	14.2	520	1
795	RPM	692	723	501	0	30.9	0	6.2	6.1	8.5	14.3	522	3
796	SOUTHLAND	692	NR	7717a	-3	-38.7	NM	NM	NM	NM	NM	2741	-5
797	MITCHELL ENERGY & DEVELOPMENT	691	635	864a	16	48.8	19	5.6	5.5	6.6	7.8	2216	5
798	QUANTUM	691	689	1074	50	49.6	-26	4.6	9.3	19.5	17.7	496	19
799	AMERICAN MEDICAL HOLDINGS	690	NR	2452	-2	3.7	NM	0.2	NM	1.7	0.7	3128	-1
800	BERGEN BRUNSWIG	688	521	4961y	9	56.1	13	1.1	1.4	9.9	13.9	1492	7
801	ROYAL APPLIANCE MFG.	687	NR	273	128	27.4	299	10.0	5.7	NA	NA	121	96
802	USLIFE	686	804	1383	12	74.9	9	5.4	5.6	8.4	7.7	5153	14
803	VICOR	684	NR	56	51	11.2	121	20.2	13.8	17.8	18.2	78	182
804	MORRISON KNUDSEN	683	697	1980y	16	35.1	-4	1.8	2.1	8.0	9.5	1034	8
805	VALHI	683	588	766	0	20.1	-73	2.6	9.6	7.7	5.2	1177	-64
806	CONSOLIDATED STORES	682	NR	753	14	20.1	342	2.7	0.7	11.7	13.1	343	2
807	ALBERTO-CULVER	681	662	930	15	31.5	-14	3.4	4.5	9.5	12.1	562	32
808	SPRINGS INDUSTRIES	681	841	1890	1	27.1	NM	1.4	NM	5.2	4.8	1251	4
809	U.S. SHOE	679	768	2737a	-1	-28.8	NM	NM	1.9	NM	-5.7	1177	-7
810	CHRIS-CRAFT INDUSTRIES	678	637	284	-5	58.3	-80	20.5	98.0	6.0	5.6	2017	2
811	INLAND STEEL INDUSTRIES	677	644	3404	-12	-275.1	NM	NM	NM	NM	-24.3	2698	-8
812	WABAN	675	890	2784	16	30.0	63	1.1	0.8	7.2	7.7	786	36
813	JENNY CRAIG	674	NR	444	NA	38.6	NA	8.7	NA	NA	NM	117	NA
814	IES INDUSTRIES	671	922	662	6	46.8	-43	7.1	13.3	7.6	9.6	1449	3
815	PHM	668	NR	1214y	5	42.6	43	3.5	2.6	NA	12.7	3753	-10
816	WATTS INDUSTRIES	668	773	384	19	34.2	17	8.9	9.1	9.6	13.4	452	49
817	CABLEVISION SYSTEMS	668	752	603	7	-227.2	NM	NM	NM	NM	NM	1502	-10
818	TRINOVA	667	660	1681	-14	-184.1	NM	NM	2.3	NM	-49.1	1070	-19
819	WASHINGTON GAS LIGHT	666	762	705	3	47.2	11	6.7	6.2	9.0	10.7	1119	6
820	CENTRAL BANCSHARES OF THE SOUTH	665	979	572	12	59.4	21	10.4	9.5	23.9	15.1	6122	25
821	A.H. BELO	665	764	432	-2	12.4	-58	2.9	6.7	NA	5.4	746	8
822	IOWA-ILLINOIS GAS & ELECTRIC	665	790	513	0	54.4	-2	10.6	10.8	6.9	11.3	1544	8
823	UNION BANK	663	650	1633	-3	93.5	-36	5.7	8.7	NA	9.2	17474	7
824	MERCHANTS NATIONAL	659	NR	537	-6	5.8	-63	1.1	2.8	NM	1.8	5806	C
825	STANHOME	658	632	710	5	45.1	-12	6.3	7.6	21.4	20.2	419	7



RANK	12 MONTH HIGH/LOW \$	PRICE AS% OF BOOK VALUE	P/E RATIO	DIVIDENDS		SHARES			TURN-OVER %	FY	EARNINGS PER SHARE				INDUSTRY GROUP
				YIELD %	PAYOUT %	TOTAL RETURN %	INSTITUTIONS HOLDING %	SHRS OUT MIL			1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST. \$	VARIATION %	
35/18	136	20	0.00	0	91	64	21	359.3	12	0.38	1.72	2.27	23.8	Banks D	
32/14	880	23	0.00	0	NA	27	25	NA	12	1.27	1.25	1.55	1.9	Consumer A	
19/13	2481	NA	0.00	0	36	22	37	13.5	12	0.29	NA	NA	NM	Telecomms. A	
22/11	143	NM	0.27	38	26	37	38	267.1	08	0.13	0.13	0.81	38.3	Electrical D	
29/18	126	10	4.02	41	25	49	31	25.6	12	1.85	2.27	2.40	2.9	Utilities A	
38/9	1912	48	0.00	0	278	46	22	366.7	12	0.43	0.69	0.93	9.7	Electrical A	
35/22	429	23	2.03	47	32	49	23	57.6	12	1.22	1.35	1.54	2.6	Manufacturing A	
30/21	670	22	2.02	45	35	43	24	22.6	12	1.16	1.33	1.51	1.3	Services E	
41/27	129	10	3.66	36	52	45	18	86.5	12	3.50	3.85	4.19	1.7	Banks B	
36/20	210	13	2.87	38	35	34	19	75.1	12	2.60	2.75	2.93	1.7	Banks D	
9/3	64	NM	0.00	0	150	14	87	89.4	12	-5.23	-0.89	-1.16	84.5	Banks A	
39/24	138	12	2.04	24	57	37	19	28.4	12	3.02	3.17	3.35	2.1	Banks B	
62/23	263	12	1.71	21	-44	68	25	471.7	01	2.30	2.31	1.65	11.5	Office equipment C	
32/18	333	23	0.94	22	44	32	23	48.5	12	1.28	1.28	1.65	6.1	Transportation D	
24/18	319	19	3.06	59	14	41	31	69.7	05	1.03	1.15d	1.28	3.1	Housing A	
3/1	NEG	NA	0.00	0	NA	NA	410	28.1	12	-15.10	NA	NA	NM	Food C	
21/14	110	16	2.71	43	-10	20	47	21.8	01	1.01	0.93d	1.11	13.5	Fuel B	
18/9	246	18	0.00	0	11	54	42	529.3	03	1.69	0.93d	1.44	11.8	Office equipment B	
13/5	122	NM	0.00	0	86	30	77	35.6	08	NR	-0.38	NA	NM	Health care C	
26/16	170	12	2.18	27	-23	60	37	117.7	08	1.46	1.50	1.34	6.0	Health care A	
62/17	5379	25	0.00	0	NA	33	13	NA	12	0.93	2.17	2.78	1.1	Consumer B	
48/34	71	9	3.64	34	31	58	15	53.7	12	4.27	4.83	4.96	4.0	Nonbank fin. B	
46/10	1107	58	0.00	0	248	19	21	157.9	12	0.27	0.57	0.86	5.8	Electrical D	
61/39	184	18	3.35	62	-10	61	14	120.5	12	2.90	2.60	3.07	8.5	Services A	
10/5	177	33	3.33	111	-19	4	114	3.2	12	0.65	0.18	0.40	NM	Conglomerates	
15/4	444	34	0.00	0	277	65	46	152.2	01	0.10	0.44	0.60	8.3	Retailing	
32/21	262	24	0.96	23	-18	19	28	19.8	09	1.30	1.06	1.39	1.4	Consumer D	
39/24	120	25	3.10	78	45	41	18	39.5	12	-0.39	1.53	2.63	9.9	Manufacturing D	
17/10	133	19	3.47	64	45	66	45	111.5	01	-0.61	0.81d	1.26	13.5	Retailing	
32/24	66	12	0.00	0	-11	48	25	23.8	12	11.11	2.22	2.20	NM	Publishing/TV A	
26/17	54	NM	0.00	0	-1	79	31	69.7	12	-1.41	-9.88	-1.19	131.1	Metals B	
26/14	174	23	0.00	0	62	73	29	183.2	01	0.64	1.01	1.28	7.0	Retailing	
34/22	NM	19	2.04	39	NA	NA	28	NA	06	NA	1.29	NA	NM	Services E	
29/26	145	15	7.60	114	8	16	24	22.1	12	4.10	1.85	2.26	8.4	Utilities A	
32/12	200	16	0.43	7	99	48	24	69.2	12	1.18	1.71	2.07	9.7	Housing B	
54/42	262	20	0.57	12	16	51	14	56.4	06	2.18	2.43	2.59	1.5	Manufacturing A	
37/22	NEG	NM	0.00	0	17	40	22	28.2	12	-12.36	-9.55d	-7.37	NM	Publishing/TV A	
28/15	178	NM	2.88	DEF	-2	62	28	75.3	12	1.51	-6.52	0.75	44.0	Manufacturing A	
35/28	155	15	6.32	92	22	23	20	26.2	09	2.51	2.28	2.62	2.3	Utilities B	
32/17	174	11	2.89	33	99	28	22	39.5	12	2.34	2.70	3.00	2.7	Banks C	
39/24	289	54	1.47	80	27	46	19	37.7	12	1.55	0.65	1.15	7.0	Publishing/TV B	
26/20	150	13	6.99	93	24	16	27	29.1	12	1.99	1.86	2.08	3.4	Utilities A	
27/17	72	8	6.83	53	3	81	32	10.1	12	4.23	2.64	3.89	9.0	Banks D	
45/17	201	NM	2.70	300	169	52	15	84.8	12	1.07	0.40	3.09	9.1	Banks B	
45/31	294	15	2.77	42	-15	73	20	88.5	12	2.55	2.21	2.77	6.5	Consumer D	



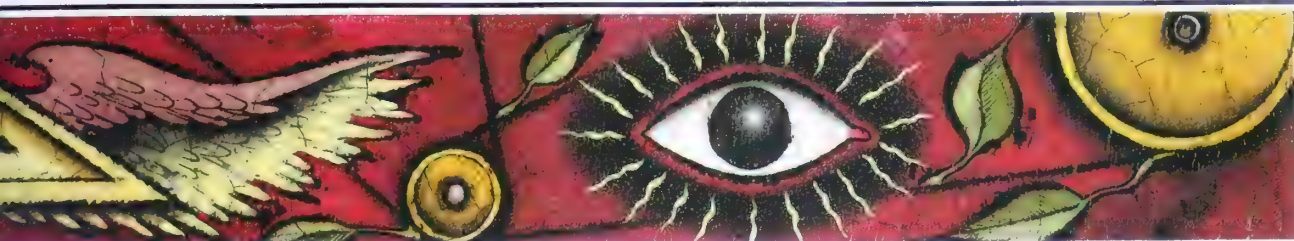
RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %
826	U.S. BIOSCIENCE	655	755	3	NM	-6.5	NM	NM	NM	NM	-7.1	97	14
827	COMDISCO	654	527	2200y	10	81.0	-1	3.7	4.1	6.7	12.3	5148	
828	BEVERLY ENTERPRISES	654	692	2301	9	29.2	125	1.3	0.6	6.5	5.5	1673	
829	INB FINANCIAL	651	902	643	-2	48.1	18	7.5	6.2	14.7	10.4	6556	
830	CONSOLIDATED FREIGHTWAYS	649	760	4082	-3	-40.4	NM	NM	NM	NM	-9.7	2285	
831	LEE ENTERPRISES	644	710	339	14	29.6	-33	8.7	14.7	11.1	15.7	468	
832	TRINITY INDUSTRIES	644	811	1206	-7	21.6	-31	1.8	2.4	5.9	6.3	951	
833	MICHIGAN NATIONAL	639	NR	1097	-11	50.1	4	4.6	3.9	NA	6.7	10650	
834	ROCKEFELLER CENTER PROPERTIES	638	669	123y	0	38.3	3	31.1	30.2	NA	6.9	1473	
835	HON INDUSTRIES	638	769	608	-8	32.9	-24	5.4	6.5	19.1	22.8	281	
836	PAGING NETWORK	636	NR	166	41	-9.3	NM	NM	NM	NM	NM	178	NA
837	DANAHER	636	727	837y	-1	13.3	-63	1.6	4.2	4.2	4.2	735	
838	THERMO INSTRUMENT SYSTEMS	633	829	339	19	24.8	31	7.3	6.6	7.8	11.5	498	3
839	COMMUNITY PSYCHIATRIC CENTERS	633	359	393	5	45.3	-46	11.5	22.2	8.8	9.2	572	
840	PACIFICARE HEALTH SYSTEMS	633	NR	1339	26	29.8	73	2.2	1.6	18.7	27.9	475	7
841	DIAMOND SHAMROCK	631	737	2576	-5	37.1	-52	1.4	2.9	7.5	8.4	1222	
842	XILINX	629	822	130	56	22.8	71	17.5	16.0	21.4	22.1	138	3
843	BATTLE MOUNTAIN GOLD	628	749	170	19	-1.2	NM	NM	11.2	NM	0.4	523	1
844	GRUMMAN	628	828	4038y	0	99.3	16	2.5	2.1	10.8	10.4	2470	
845	GENETICS INSTITUTE	627	785	83	104	-10.7	NM	NM	NM	NM	-9.7	192	
846	BP PRUDHOE BAY ROYALTY TRUST	626	724	93a	34	92.1	35	99.6	99.3	NM	19.5	473	
847	AST RESEARCH	621	639	827	41	70.2	34	8.5	9.0	20.5	21.6	515	4
848	FRED MEYER	620	991	2703	9	45.2	35	1.7	1.4	NA	13.5	973	
849	BWIP HOLDING	619	NR	430	14	31.2	18	7.3	7.0	19.0	23.9	332	
850	CML GROUP	618	NR	402	29	29.9	65	7.4	5.8	26.7	32.9	191	
851	BECKMAN INSTRUMENTS	618	836	858	5	38.1	5	4.4	4.4	11.8	11.1	712	
852	NEVADA POWER	617	732	539	12	35.2	41	6.5	5.2	NA	6.9	1314	
853	LINEAR TECHNOLOGY	616	NR	107	29	20.7	49	19.3	16.6	19.7	20.2	134	2
854	OEA	616	NR	90	8	13.3	24	14.8	12.9	15.7	15.7	95	1
855	MEDITRUST	614	954	113y	27	37.9	31	33.6	32.5	NM	10.6	919	2
856	ATLANTIC SOUTHEAST AIRLINES	613	NR	222	19	32.5	28	14.6	13.6	12.8	22.8	375	1
857	T. ROWE PRICE ASSOCIATES	613	977	205y	21	30.4	45	14.8	12.3	22.7	24.1	180	1
858	CLAYTON HOMES	611	NR	342	16	33.2	45	9.7	7.8	10.8	15.2	486	2
859	SBARRO	611	757	210y	10	21.8	7	10.4	10.7	20.1	20.1	159	2
860	CYPRESS SEMICONDUCTOR	610	696	287	27	34.2	3	11.9	14.8	11.4	11.4	375	2
861	BB&T FINANCIAL	608	884	594	6	60.2	12	10.1	9.6	14.3	12.7	6229	2
862	HEILIG-MEYERS	608	NR	487y	11	24.2	16	5.0	4.7	9.8	9.4	586	1
863	RYAN'S FAMILY STEAK HOUSES	608	943	299	9	23.3	-3	7.8	8.8	13.7	13.6	238	1
864	BALLARD MEDICAL PRODUCTS	607	NR	41	28	10.4	52	25.6	21.5	29.0	29.0	41	5
865	FILENE'S BASEMENT	606	NR	444a	NA	NA	NA	NA	NA	NA	NA	193	2
866	CENTRAL MAINE POWER	604	850	867	11	59.1	21	6.8	6.3	9.3	11.1	1567	
867	VALUE CITY DEPARTMENT STORES	603	NR	639y	15	27.1	61	4.2	3.0	22.7	22.8	263	NA
868	OVERSEAS SHIPHOLDING GROUP	603	728	419y	5	55.1	-1	13.1	14.0	7.2	7.4	1539	
869	CALMAT	602	765	373y	-12	18.9	-38	5.1	7.2	4.9	4.9	553	
870	WISCONSIN PUBLIC SERVICE	601	774	624	6	54.2	11	8.7	8.3	9.3	14.0	1074	



RANK	12 MONTH HIGH/LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	DIVIDENDS		SHARES			FY	EARNINGS PER SHARE		ANALYSTS' ESTIMATES		INDUSTRY GROUP
				YIELD %	PAYOUT %	TOTAL RETURN %	INST. TUTIONS HOLDING %	SHRS OUT. MIL.		1990 ACTUAL \$	1991 ACTUAL \$	1992 EST. \$	VARIATION %	
44/13	707	NM	0.00	0	9	48	39	198.6	12	-0.15	-0.18	0.16	100.0	Health care B
27/16	99	8	1.65	13	-26	51	41	49.2	09	1.99	2.03	2.21	2.7	Office equipment C
12/7	128	24	0.00	0	-5	70	74	153.2	12	0.19	0.37	0.55	9.1	Health care C
39/23	141	NA	3.40	NA	62	36	18	54.7	12	2.23b	NA d	3.06	2.0	Banks B
20/10	119	NM	0.00	0	-4	71	35	117.2	12	-1.16	-1.52	0.83	59.0	Transportation D
32/20	341	21	2.73	56	-2	35	23	22.1	09	1.82	1.35	1.55	NM	Publishing/TV B
32/23	187	27	2.62	71	33	75	21	75.1	03	1.42	1.12d	2.08	26.4	Transportation C
48/20	86	13	4.58	60	130	48	15	114.4	12	3.21	3.36	4.42	7.9	Banks B
20/14	115	17	11.29	188	-5	19	38	45.3	12	1.01	1.02	0.85	NM	Housing B
21/15	442	19	1.87	35	9	25	33	19.3	12	1.30	1.02	1.17	3.4	Office equipment A
26/16	NEG	NM	0.00	0	NA	18	27	NA	12	-0.03	-0.33	0.42	NM	Telecomms. A
25/18	201	48	0.00	0	23	31	28	38.1	12	1.34	0.47	1.43	18.9	Manufacturing B
26/18	293	24	0.00	0	13	12	29	28.9	12	0.74	0.92	1.14	4.4	Electrical C
40/11	129	14	2.64	37	-59	59	46	234.4	11	1.80	0.98	0.99	23.2	Health care C
63/22	592	25	0.00	0	149	26	11	289.0	09	1.48	2.20	2.83	8.5	Health care C
27/18	143	16	2.36	37	-4	68	29	63.9	12	3.04	1.39	2.25	8.0	Fuel B
33/18	609	28	0.00	0	58	57	23	364.0	03	0.70	1.00d	1.26	5.6	Electrical D
11/6	200	NM	1.27	DEF	10	33	80	109.0	12	0.21	-0.02	0.08	112.5	Metals C
20/14	68	7	5.30	35	34	32	33	39.2	12	2.48	2.88	2.74	8.8	Aerospace
33/25	397	NM	0.00	0	NA	NA	24	NA	11	-2.04	-1.05	0.17	288.2	Health care B
33/27	132	8	11.94	99	18	50	21	47.7	12	3.57	3.54d	3.32	5.4	Fuel B
33/15	191	10	0.00	0	-14	41	31	763.8	06	1.43	2.13	2.23	4.0	Office equipment B
29/15	185	15	0.00	0	71	28	23	71.3	01	1.37	1.80	2.06	4.9	Retailing
27/13	475	18	0.15	3	NA	25	24	NA	12	0.89	1.38	1.82	3.3	Manufacturing C
42/15	681	26	0.05	1	176	61	16	170.2	07	1.06	1.52	1.78	3.4	Retailing
23/15	180	16	1.31	21	20	68	29	51.0	12	1.26	1.32	1.55	2.6	Electrical C
22/17	133	18	8.42	152	-4	12	32	71.1	12	0.78	1.05	1.54	5.8	Utilities A
45/15	602	38	0.00	0	157	78	17	159.3	06	0.67	0.96	1.31	1.5	Electrical D
37/13	730	51	0.33	17	147	27	20	87.6	07	0.47	0.60	0.72	1.4	Aerospace
31/20	171	15	8.97	137	42	55	23	63.4	12	1.57	1.75	1.84	4.3	Health care C
39/17	429	19	1.33	25	86	51	17	163.3	12	1.45	1.91	2.32	9.1	Transportation A
50/24	485	21	1.69	35	94	48	14	62.8	12	1.42	2.04	2.42	2.1	Nonbank fin. A
24/11	280	25	0.00	0	58	63	27	121.2	06	0.70b	0.92	1.05	4.8	Housing B
50/32	563	28	0.00	0	4	45	14	68.4	12	1.52	1.61	2.06	1.5	Leisure A
25/13	204	19	0.00	0	-11	74	38	186.3	12	0.87	0.85	0.99	16.2	Electrical D
26/18	129	10	3.67	36	35	24	25	58.4	12	2.37b	2.44	2.62	0.8	Banks C
33/17	237	22	1.01	23	83	81	19	57.0	02	1.32	1.42d	1.63	2.5	Consumer B
13/7	355	26	0.00	0	67	57	53	175.6	12	0.46	0.44	0.56	3.6	Leisure A
35/13	1699	68	0.13	8	163	37	19	141.4	09	0.33	0.47	0.62	3.2	Health care D
37/15	683	39	0.00	0	NA	50	20	NA	01	NR	0.80d	1.01	2.0	Retailing
23/17	125	11	7.75	86	19	23	30	44.8	12	1.68	1.82	1.90	3.7	Utilities A
25/9	508	17	0.00	0	NA	21	31	NA	07	0.65	1.16	1.02	8.8	Retailing
22/17	80	11	3.29	36	8	46	33	20.8	12	1.63	1.67	1.61	16.8	Transportation D
29/19	156	32	2.46	79	12	38	23	20.2	12	1.08	0.81	1.35	17.8	Housing A
29/24	166	12	6.48	76	13	25	23	31.9	12	2.00	2.23	2.21	3.6	Utilities A



RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL	YEAR AGO RANK	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %
871	TELEFLEX	601	879	483y	9	29.8	4	6.2	6.4	12.6	14.5	435	
872	APACHE	597	713	357y	31	34.6	-14	9.7	14.8	5.9	8.1	1200	
873	ALLIANCE PHARMACEUTICAL	597	NR	1	0	-20.9	NM	NM	NM	NM	-20.7	104	10
874	ITEL	597	751	1728a	-6	-65.8	NM	NM	NM	NA	-16.4	3162	-2
875	McCLATCHY NEWSPAPERS	595	776	427	1	23.7	-10	5.6	6.3	6.9	7.3	477	
876	STANDARD FEDERAL BANK	595	NR	874y	-4	65.8	64	7.5	4.4	9.2	12.5	9514	
877	KAUFMAN & BROAD HOME	593	968	1221	-11	26.5	-34	2.2	2.9	7.5	11.0	1373	-1
878	W. R. BERKLEY	591	797	541	1	46.6	29	8.6	6.7	10.7	11.5	1526	
879	HARNISCHFEGER INDUSTRIES	589	729	1554	-10	61.5	-11	4.0	4.0	10.4	10.3	1493	
880	M. A. HANNA	588	739	1146	3	-16.7	NM	NM	3.7	NM	-4.7	1033	
881	PITTSTON	588	695	1946y	4	-28.8	NM	NM	2.5	NM	-9.1	1240	1
882	FOUNDATION HEALTH	587	NR	1024	7	35.6	121	3.5	1.7	NA	37.2	263	1
883	MCN	587	831	1276	6	36.0	6	2.8	2.8	8.8	11.6	1517	
884	PICTURETEL	586	NR	78	111	4.0	NM	5.2	NM	3.3	3.4	145	41
885	LEUCADIA NATIONAL	582	NR	835a	24	26.1	-63	3.1	10.4	5.4	8.7	4404	8
886	SYNOVUS FINANCIAL	581	777	488	21	40.5	13	8.3	8.9	12.0	13.7	4070	3
887	NEUTROGENA	580	912	239	13	22.1	60	9.3	6.6	20.8	20.8	159	1
888	PHM	580	838	1997	0	47.7	-5	2.4	2.5	NA	11.8	4358	
889	CATELLUS DEVELOPMENT	580	NR	145	-33	5.0	-93	3.5	31.9	5.4	3.5	1173	1
890	VERIFONE	579	NR	188	21	18.7	54	10.0	7.8	12.0	12.2	189	2
891	WALLACE COMPUTER SERVICES	578	771	482	6	36.1	-8	7.5	8.6	10.1	10.9	444	1
892	FIRST BRANDS	577	766	997	-5	38.6	-8	3.9	4.0	10.4	15.0	805	
893	CENTRAL NEWSPAPERS	576	819	420	-3	25.9	-8	6.2	6.6	8.9	9.1	389	
894	OCTEL COMMUNICATIONS	575	NR	175	24	19.5	18	11.1	11.6	12.5	12.5	179	2
895	INTERNATIONAL DAIRY QUEEN	575	808	287	2	27.9	5	9.7	9.4	19.6	28.9	175	
896	HOLNAM	573	688	979	-9	-95.1	NM	NM	NM	NM	-17.1	1611	
897	TERADYNE	572	NR	509	11	18.3	NM	3.6	NM	7.3	6.2	421	
898	CHURCH & DWIGHT	570	852	485	13	26.5	14	5.5	5.4	19.2	19.8	237	-1
899	MARVEL ENTERTAINMENT GROUP	570	NR	115	42	16.5	204	14.4	6.7	27.6	38.4	100	N
900	PIC 'N' SAVE	569	NR	545a	NA	31.8	NA	5.8	NA	12.7	15.6	387	
901	MERRY-GO-ROUND ENTERPRISES	567	623	732a	24	39.2	13	5.4	5.8	NA	19.7	335	3
902	SIERRA PACIFIC RESOURCES	565	824	469	0	46.3	-4	9.9	10.2	7.8	9.8	1369	
903	NATIONAL PRESTO INDUSTRIES	564	NR	162	27	36.7	26	22.7	22.9	16.5	16.7	254	
904	NERCO	564	619	920	11	83.1	4	9.0	9.7	10.7	13.7	2144	3
905	MEDIA GENERAL	564	794	586	-5	-62.1	NM	NM	4.2	NM	-30.8	762	
906	BROAD	563	NR	814y	2	46.8	18	5.8	5.0	6.6	11.2	11836	1
907	WESTMARK INTERNATIONAL	563	NR	505	4	21.4	31	4.3	3.4	6.9	6.8	453	1
908	MORRISON	562	NR	999y	7	28.9	42	2.9	2.2	NA	15.0	355	
909	STRUCTURAL DYNAMICS RESEARCH	562	853	146	23	17.9	35	12.2	11.2	21.6	21.6	134	2
910	FISHER-PRICE	561	NR	638	4	17.3	NM	2.7	NM	NA	7.8	468	1
911	H. B. FULLER	560	NR	853	8	27.7	31	3.2	2.7	NA	13.3	509	
912	DOMINION BANKSHARES	559	NR	1030	-7	20.6	NM	2.0	NM	NM	3.5	9711	
913	LAWTER INTERNATIONAL	559	888	153	2	26.5	13	17.3	15.6	NA	23.9	171	1
914	GOULDS PUMPS	559	823	567	2	31.3	2	5.5	5.5	13.3	14.3	396	
915	LANDS' END	557	948	641a	11	23.4	44	3.6	2.8	NA	20.8	274	4

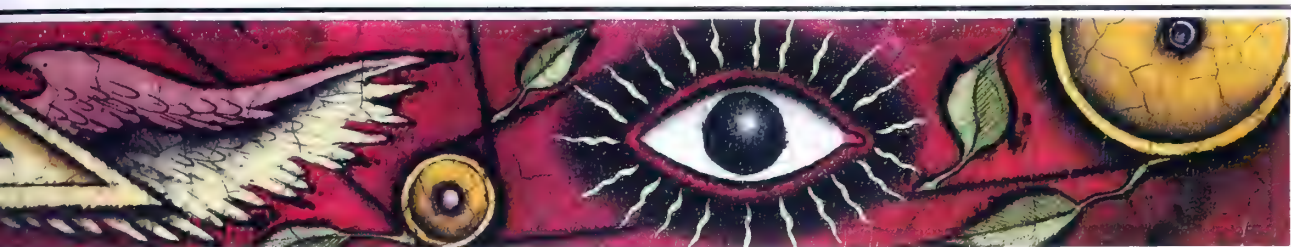


VALUATION		DIVIDENDS					SHARES			EARNINGS PER SHARE					INDUSTRY GROUP	
RANK	12 MONTH HIGH/LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INST TUTIONS HOLDING %	SHRS OUT MIL	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES			
													1992 EST. \$	VAR. ATION %		
5	40/26	293	20	1.10	23	43	51	17	27.6	12	1.73	1.77	2.11	2.4	Aerospace	
8	21/12	140	17	2.20	37	-13	59	47	98.9	12	0.90	0.76	0.80	27.5	Fuel B	
8	44/9	593	NM	0.00	0	300	30	18	251.5	06	-0.94	-1.24	0.80	51.3	Health care B	
9	20/13	136	23	0.00	0	45	91	32	104.1	12	-0.82	0.80d	0.62	40.3	Conglomerates	
1	23/15	182	25	0.96	24	11	11	29	9.6	12	0.93	0.83	1.02	3.9	Publishing/TV B	
9	21/9	113	9	2.29	21	118	78	31	83.1	12	1.30	2.11	2.64	4.5	Nonbank fin. C	
	25/9	247	26	1.45	38	60	54	29	149.2	11	1.25	0.80	1.46	10.3	Housing B	
8	36/24	146	13	0.97	12	16	68	18	76.7	12	NA	2.61	3.01	4.3	Nonbank fin. B	
0	23/17	99	10	2.00	19	5	76	29	73.4	10	2.18	2.08	1.84	9.2	Manufacturing C	
6	27/20	155	NM	2.52	DEF	17	64	23	42.6	12	2.03	-0.75	1.68	10.7	Chemicals	
6	21/15	186	NM	1.27	DEF	-7	54	37	77.7	12	1.24	-0.77	1.60	3.8	Fuel A	
1	37/13	621	23	0.00	0	117	70	19	240.5	06	0.92	1.33	1.72	4.1	Health care C	
2	25/20	168	16	7.37	116	14	40	26	35.8	12	1.38	1.42	2.15	3.7	Utilities B	
6	53/20	490	NM	0.00	0	133	62	13	334.1	12	-0.07	0.29	0.80	8.8	Telecomms. A	
1	52/23	195	20	0.00	0	126	18	11	12.1	12	5.35	2.57d	3.09	NM	Nonbank fin. A	
7	19/15	196	16	2.42	38	19	8	33	10.0	12	1.05	1.12	1.31	3.8	Banks C	
2	28/15	545	27	1.01	28	54	24	27	75.8	10	0.65	0.80	0.91	2.2	Consumer D	
4	37/26	143	12	3.49	41	26	78	17	48.5	04	2.78	2.93d	3.17	2.8	Transportation C	
1	15/8	401	43	0.00	0	-6	23	54	29.2	12	0.39	0.25d	0.10	NM	Housing B	
6	28/12	376	32	0.00	0	102	34	22	246.6	12	0.55	0.82	1.05	2.9	Office equipment A	
6	29/19	174	16	2.10	33	3	67	22	44.9	07	1.86	1.63	1.79	3.4	Office equipment A	
	35/21	225	12	0.15	2	23	83	22	128.2	06	2.40	2.21	1.97	6.6	Manufacturing A	
2	23/17	203	22	1.84	41	18	26	27	7.8	12	1.07	0.98	1.17	10.3	Publishing/TV B	
3	37/17	370	33	0.00	0	89	52	17	323.2	06	1.04	1.00	1.19	5.0	Telecomms. A	
2	26/14	594	21	0.00	0	13	37	26	52.1	11	0.97	1.05	1.19	3.4	Leisure A	
4	6/4	103	NM	0.00	0	-17	1	135	0.9	12	-0.24	-0.71	NA	NM	Housing A	
3	20/9	194	31	0.00	0	94	77	31	87.7	12	-0.71	0.58	1.09	6.4	Electrical C	
3	33/21	426	21	1.28	27	42	48	20	39.4	12	1.13	1.34	1.44	1.4	Consumer D	
4	33/9	1323	35	0.00	0	NA	16	24	NA	12	NR	0.68	1.12	3.6	Publishing/TV B	
9	23/10	278	17	0.00	0	90	71	31	277.0	01	0.52	1.09d	1.34	3.0	Retailing	
1	22/9	284	20	0.50	10	-25	52	53	181.2	01	0.73	0.54d	0.77	13.0	Retailing	
2	24/22	132	13	8.27	105	12	12	25	30.4	12	1.93	1.75	1.97	5.6	Utilities A	
7	77/41	257	15	3.51	54	77	50	7	46.3	12	3.94	4.98	4.63	16.6	Consumer B	
4	23/14	93	7	4.45	30	-26	14	39	14.3	12	2.05	2.12	1.20	43.3	Fuel A	
2	23/17	279	NM	2.03	DEF	4	57	26	29.3	12	0.98	-2.39	0.77	19.5	Publishing/TV B	
8	21/8	134	14	1.12	15	122	55	32	103.0	09	1.02	1.32	2.38	3.4	Nonbank fin. A	
7	63/30	180	27	0.00	0	78	84	10	379.5	12	1.61	2.09	2.57	7.8	Health care D	
4	37/17	293	18	1.88	33	102	38	16	135.2	05	1.61	1.93d	2.26	4.0	Leisure A	
1	30/15	677	35	0.00	0	42	73	27	146.1	12	0.49	0.60	0.75	2.7	Office equipment C	
7	40/22	251	NM	0.00	0	NA	46	15	NA	06	NR	0.17d	1.84	11.4	Leisure D	
1	72/35	269	20	1.01	21	89	55	9	150.0	11	2.30	3.00	3.54	3.1	Chemicals	
5	16/7	101	29	3.03	88	111	22	39	68.7	12	-1.02	0.50	0.84	27.4	Banks C	
3	14/9	505	21	3.11	66	37	45	43	35.6	12	0.55	0.61	0.70	1.4	Chemicals	
7	29/19	255	18	2.98	53	10	63	21	113.3	12	1.49	1.51	1.63	3.1	Manufacturing C	
0	35/16	495	22	0.67	15	84	17	19	35.6	01	0.75	1.34d	1.57	10.2	Retailing	



COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
	\$ MIL.	YEAR AGO RANK	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 %	12 MONTHS 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %
916 MARK IV INDUSTRIES	554	NR	1123	29	28.5	14	2.5	2.9	9.0	8.8	1041	8
917 CARDINAL DISTRIBUTION	554	868	1506	39	22.5	43	1.5	1.5	9.8	10.7	633	52
918 STAPLES	551	NR	547	83	7.9	117	1.5	1.2	5.5	5.8	280	38
919 AMSCO INTERNATIONAL	549	NR	405	21	28.4	65	7.0	5.1	14.1	14.4	326	13
920 DIAGNOSTEK	547	NR	278y	33	11.2	57	4.0	3.4	7.6	7.3	212	82
921 DEXTER	543	742	938	3	-7.1	NM	NM	4.6	-0.5	-2.3	784	3
922 MASCO INDUSTRIES	542	937	1467	-6	-9.0	NM	NM	NM	NM	-5.8	2080	-3
923 EASTERN ENTERPRISES	541	700	993	5	29.4	-54	3.0	6.7	5.6	5.7	1199	5
924 GATX	536	714	989y	14	82.7	0	8.4	9.5	9.2	11.7	3500	6
925 TRANSCO ENERGY	533	536	2739	-11	-158.4	NM	NM	1.6	NM	-36.1	4682	10
926 HECHINGER	531	NR	1608	15	26.1	12	1.6	1.7	5.2	5.1	934	13
927 UNITED MISSOURI BANCSHARES	531	990	397	-3	NA	NA	NA	9.1	NA	10.4	4692	10
928 ARMCO	531	817	1595	-8	-336.5	NM	NM	NM	NA	-46.3	2093	-13
929 FLOWERS INDUSTRIES	530	842	838	1	24.0	-24	2.9	3.8	9.3	11.7	455	4
930 SANTA FE ENERGY RESOURCES	529	555	380	-1	18.5	9	4.9	4.4	6.9	8.3	912	0
931 SAVANNAH FOODS & INDUSTRIES	529	709	1200	-1	38.3	-21	3.2	4.0	15.1	17.4	430	3
932 HELMERICH & PAYNE	527	716	202	8	12.6	-65	6.2	19.3	2.6	2.5	589	2
933 NOBLE AFFILIATES	525	685	250y	3	19.3	-32	7.7	11.8	6.6	7.4	603	7
934 HENLEY GROUP	523	986	1689a	-7	-560.0	NM	NM	NM	NM	NM	1935	-39
935 AIRBORNE FREIGHT	523	909	1367	16	30.0	-11	2.2	2.8	6.9	9.7	761	31
936 WEINGARTEN REALTY	522	839	83y	8	18.0	9	21.7	21.4	NM	12.7	441	6
937 PRECISION CASTPARTS	522	694	588	13	45.9	41	7.8	6.3	14.3	15.0	445	9
938 LIBERTY NATIONAL BANCORP	519	NR	396	6	37.8	15	9.6	8.7	15.0	11.8	4338	17
939 ARTISOFT	519	NR	54	71	9.3	59	17.1	18.4	NA	14.9	67	NA
940 GREEN TREE ACCEPTANCE	518	NR	215	22	56.7	55	26.4	20.8	17.8	20.8	876	19
941 MAGMA POWER	516	701	95y	11	33.9	13	35.8	35.2	13.4	15.6	357	10
942 VENTURE STORES	515	NR	1522y	7	41.5	20	2.7	2.4	22.1	33.5	509	13
943 NCH	515	792	666	-1	41.2	-3	6.2	6.3	15.5	16.2	449	7
944 HOME BENEFICIAL	515	981	197	-17	47.4	-29	24.0	27.9	10.5	10.5	1205	4
945 DELTA WOODSIDE INDUSTRIES	514	NR	664	25	34.8	229	5.2	2.0	12.6	11.6	463	14
946 TOKOS MEDICAL	514	NR	115	45	7.1	NM	6.2	NM	NA	13.2	79	30
947 DOLLAR GENERAL	513	NR	713a	11	18.1	40	2.5	2.0	11.0	13.1	297	10
948 CHESAPEAKE	512	NR	841	0	15.4	-8	1.8	2.0	5.1	4.8	916	5
949 INTERNATIONAL MULTIFOODS	512	801	2271	4	39.0	26	1.7	1.4	12.5	11.6	921	9
950 CENTRAL LOUISIANA ELECTRIC	512	914	337	1	44.9	6	13.3	12.7	9.1	13.0	973	6
951 CONTROL DATA	510	803	1525	-10	-8.6	NM	NM	0.2	-19.9	-2.1	1214	-15
952 ALTERA	510	NR	107	36	17.8	33	16.7	17.1	21.9	21.9	102	36
953 AMERICAN HEALTH PROPERTIES	509	976	80y	35	33.8	20	42.1	47.2	NM	11.1	631	16
954 STANDARD REGISTER	509	932	694	-3	32.7	50	4.7	3.0	9.5	9.9	464	2
955 WEST ONE BANCORP	509	970	520	3	41.2	-7	7.9	8.8	15.1	11.2	5417	10
956 HANDLEMAN	507	951	892	24	32.7	39	3.7	3.3	8.4	13.2	732	45
957 INFORMATION RESOURCES	507	NR	208	25	14.2	197	6.9	2.9	12.3	11.6	179	42
958 MEDIMMUNE	505	NR	14	327	1.6	NM	11.6	NM	5.4	4.6	65	767
959 SHOPKO STORES	504	NR	1586	NA	49.2	NA	3.1	NA	11.7	16.3	841	5
960 KIMBALL INTERNATIONAL	502	910	553	-6	29.9	-24	5.4	6.7	9.9	9.8	396	4

ALPHABETICAL INDEX OF COMPANIES BEGINS ON PAGE 211



DATE	DIVIDENDS				SHARES				EARNINGS PER SHARE				INDUSTRY GROUP		
	12 MONTH HIGH/ LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INST TUTIONS HOLDING %	SHRS OUT MIL	TURN OVER %	FY	1990 ACTUAL \$	1991 ACTUAL \$		ANALYSTS' EST MATES 1992 EST \$	VARI- ATION %
24/10	172	15		0.52	8	127	39	24	72.7	02	1.43b	1.54d	2.01	6.0	Manufacturing A
39/23	264	24		0.27	6	15	60	19	196.6	03	1.01b	1.25d	1.54	3.2	Health care A
36/12	400	65		0.00	0	158	67	18	406.1	01	0.25	0.48	0.80	6.3	Services B
26/15	278	20		0.00	0	NA	22	28	86.4	12	0.70	0.95	1.14	3.5	Health care D
29/15	359	36		0.00	0	64	27	23	80.0	03	0.35	0.65d	0.94	2.1	Retailing
26/19	173	NM		3.91	DEF	-7	81	24	43.0	12	1.74	-0.29	1.57	3.8	Chemicals
10/5	168	NM		0.00	0	87	6	59	20.6	12	-0.33	-0.31	0.27	37.0	Automotive B
30/22	105	18		5.83	108	-13	70	23	51.3	12	2.77	1.30	2.43	6.6	Utilities B
40/22	90	8		4.34	34	-16	82	19	78.7	12	3.61	3.56	3.29	4.6	Transportation D
36/17	100	NM		3.45	DEF	-45	58	31	121.2	12	0.53	-6.58	1.24	29.0	Utilities B
16/8	105	19		1.26	24	61	42	42	170.3	01	0.65	0.66	0.90	5.6	Retailing
40/26	145	13		1.89	25	51	7	14	8.5	12	2.70	2.86	3.04	0.7	Banks B
7/4	71	NM		0.00	0	12	56	88	54.8	12	-0.71	-3.89	0.18	344.4	Metals B
18/13	257	22		4.52	99	8	40	34	42.1	06	0.98	0.71	0.90	4.4	Food B
17/7	238	28		1.94	55	-45	40	64	51.3	12	0.28	0.29	0.26	46.2	Fuel B
27/15	241	14		2.63	36	-15	40	27	63.0	12	1.80	1.43	1.52	5.9	Food B
29/18	107	24		2.14	52	-28	58	24	65.4	09	1.97	0.88	0.71	28.2	Fuel C
18/12	202	27		1.35	36	-21	49	44	53.5	12	0.65	0.44	0.53	37.7	Fuel C
30/18	127	NA		0.00	0	45	25	20	179.2	12	-5.13	NA	NA	NM	Electrical C
30/19	186	20		1.09	21	24	89	19	142.4	12	1.76	1.40	1.80	12.2	Transportation C
35/26	368	29		6.12	178	25	39	17	26.6	12	1.01	1.08	1.15	NM	Housing B
43/26	171	14		0.41	6	-23	67	18	56.7	03	1.92	2.15d	2.64	12.9	Metals C
34/17	162	13		2.87	39	86	38	19	31.9	12	1.82b	2.07	2.28	1.8	Banks C
53/17	832	66		0.00	0	NA	22	17	NA	06	NA	0.46	0.75	5.3	Office equipment C
50/13	228	11		1.37	15	157	92	12	216.3	12	2.35	4.01	4.14	5.8	Nonbank fin. A
34/23	237	16		0.00	0	-13	26	23	53.7	12	1.32	1.44	1.77	9.0	Utilities A
33/14	415	12		1.76	22	115	58	17	175.6	01	2.06	2.48	2.66	1.9	Retailing
78/58	203	12		1.60	20	6	39	8	20.1	04	5.19	5.12d	5.55	3.8	Consumer D
28/17	115	11		2.76	30	42	35	19	21.2	12	3.29	2.51	2.64	4.2	Nonbank fin. B
25/8	171	15		2.05	32	137	33	26	106.6	06	0.32	1.27	1.68	1.8	Manufacturing D
46/18	949	76		0.00	0	103	64	15	259.4	12	-0.20	0.44	1.06	2.8	Health care C
29/8	371	25		0.80	20	217	42	20	205.4	01	0.73	1.00d	1.16	1.7	Retailing
29/16	161	33		2.89	96	61	48	21	27.4	12	0.81	0.75	1.49	14.1	Paper B
32/24	153	13		3.05	39	6	57	19	63.6	02	1.81	2.03d	2.18	1.8	Food B
50/38	155	12		5.83	70	33	32	11	24.8	12	3.70	3.84	3.82	1.6	Utilities A
13/8	117	NM		0.00	0	-13	82	43	65.4	12	0.05	-0.21	0.66	37.9	Office equipment B
36/14	627	30		0.00	0	82	73	20	275.3	12	0.67	0.87	1.11	1.8	Electrical D
37/25	168	14		9.00	129	29	39	17	90.0	12	1.90	2.09	2.21	2.3	Health care C
18/12	155	16		3.38	53	41	72	29	41.5	12	0.74	1.14	1.23	10.6	Office equipment A
38/27	139	12		2.65	33	31	38	14	92.0	12	3.34	2.93	3.70	3.2	Banks D
19/11	205	14		2.62	36	26	72	33	88.8	04	0.72	1.12d	1.34	10.4	Services E
36/16	414	37		0.00	0	95	70	22	188.4	12	0.25	0.63	0.91	8.8	Services E
55/10	1596	NM		0.00	0	NA	29	13	NA	12	-1.02	0.11	0.17	5.9	Health care B
17/12	167	10		2.79	29	NA	19	32	NA	02	1.41	1.52d	1.52	0.0	Retailing
28/18	165	17		2.86	48	40	23	21	13.5	06	2.05	1.42	1.56	4.5	Consumer B



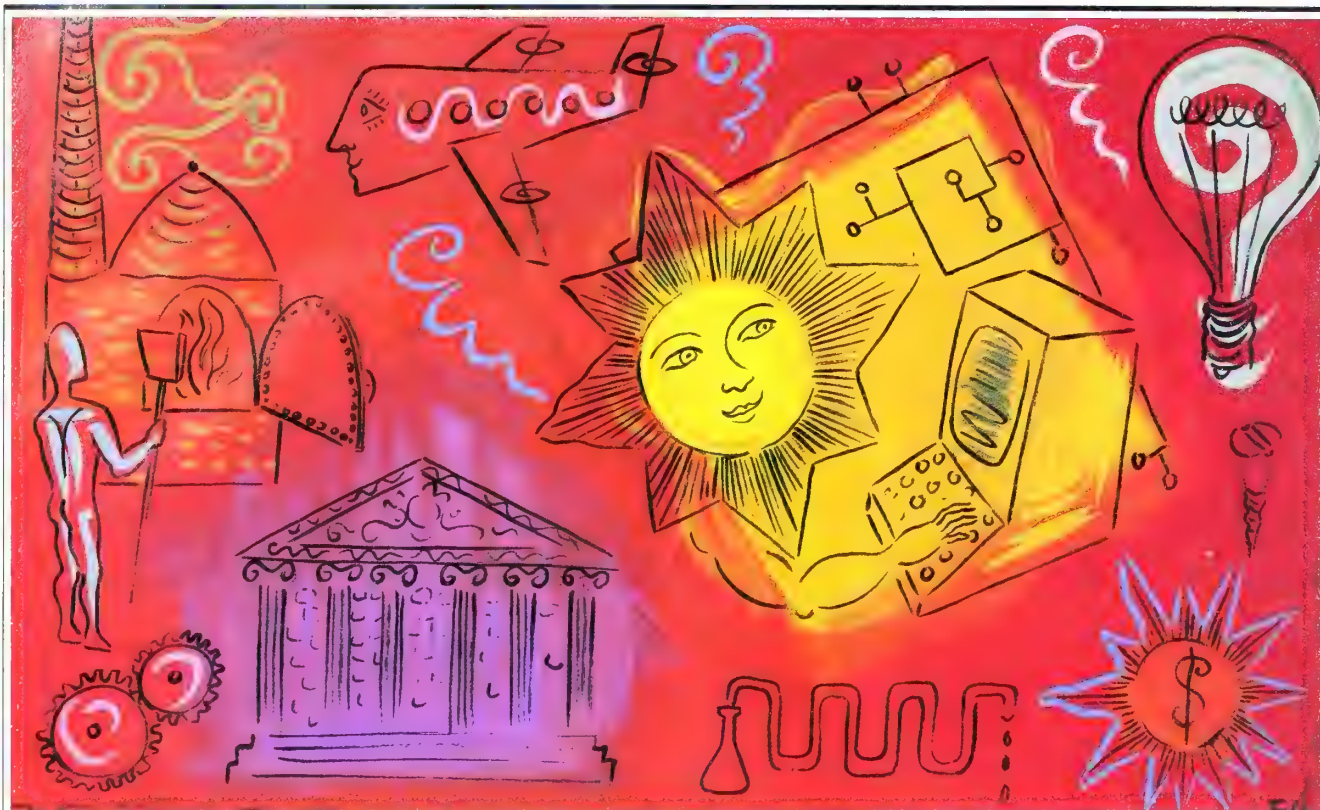
RANK	COMPANY	MARKET VALUE		SALES		PROFITS		MARGINS		RETURN		ASSETS	
		\$ MIL.	YEAR AGO RANK	12 MONTHS % CHG.	CHANGE FROM 1990 \$ MIL.	12 MONTHS % CHG.	CHANGE FROM 1990 \$ MIL.	12 MONTHS %	12 MONTHS %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	12 MONTHS % CHG.	CHANGE FROM 1990 \$ MIL.
961	TEKTRONIX	502	715	1311	-6	44.9	NM	3.4	NM	10.2	10.1	888	-5
962	HEALTH CARE PROPERTY INVESTORS	501	936	79y	10	26.5	14	33.3	32.2	NM	12.5	459	-2
963	NEIMAN MARCUS GROUP	500	805	1755y	2	4.2	-81	0.2	1.3	3.5	NM	1193	4
964	WESCO FINANCIAL	498	934	133a	7	30.2	11	22.7	21.9	8.1	8.2	871	17
965	LENNAR	498	NR	326y	-7	21.1	55	6.5	3.9	NA	7.4	862	-2
966	HERMAN MILLER	495	807	803	-11	0.4	-99	0.0	5.3	0.2	0.1	474	-1
967	ADVANTA	494	NR	203y	51	25.2	67	12.4	11.3	11.5	23.1	1717	16
968	SPI PHARMACEUTICALS	494	NR	226a	71	22.2	60	9.8	10.5	19.9	20.9	267	100
969	ALBANY INTERNATIONAL	493	963	557y	0	10.3	35	1.9	1.4	4.2	4.2	675	4
970	ARVIN INDUSTRIES	492	911	1676	-1	22.0	-34	1.3	2.0	5.5	3.7	1125	-0
971	SYSTEM SOFTWARE ASSOCIATES	491	NR	171	26	20.7	3	12.1	14.8	NA	30.6	136	15
972	MID-AMERICAN WASTE SYSTEMS	491	NR	120y	53	17.1	103	14.3	10.8	6.5	7.8	371	125
973	UNITED ASSET MANAGEMENT	491	NR	227y	33	24.6	35	10.8	10.7	NA	13.9	455	16
974	FISERV	488	NR	281	54	18.3	33	6.5	7.5	9.3	11.4	740	31
975	SEALED AIR	487	NR	435	5	16.2	42	3.7	2.8	21.6	NM	275	27
976	LANCASTER COLONY	486	NR	516	2	25.1	56	4.9	3.2	15.8	17.3	289	-0
977	ANTHEM ELECTRONICS	485	NR	420	3	23.3	0	5.6	5.7	15.7	15.6	182	25
978	SOUTHERN INDIANA GAS & ELECTRIC	485	956	323	0	38.5	2	11.9	11.7	10.0	14.4	747	1
979	LA-Z-BOY CHAIR	480	992	610	0	24.9	-4	4.1	4.3	9.6	10.6	370	5
980	BUFFETS	478	NR	196	35	11.1	39	5.7	5.5	21.1	23.1	73	31
981	GREIF BROS.	477	926	437a	0	22.2	1	5.1	5.1	8.1	8.1	327	10
982	UNITED ILLUMINATING	477	867	673	5	48.2	-11	7.2	8.4	7.3	11.0	2263	-3
983	MGM GRAND	477	NR	147	-17	-12.2	NM	NM	NM	NM	-2.8	496	32
984	XOMA	476	887	17	16	-34.3	NM	NM	NM	NA	-25.5	154	55
985	FHP INTERNATIONAL	476	779	1430	24	33.3	3	2.3	2.8	10.6	11.7	640	34
986	WELLFLEET COMMUNICATIONS	476	NR	58	NA	6.4	NA	11.0	NA	10.1	10.0	76	NA
987	STOP & SHOP	476	NR	5088a	4	25.7	NM	0.5	NM	6.8	26.6	2112	0
988	DAUPHIN DEPOSIT	476	905	334	0	45.7	1	13.7	13.5	17.4	14.1	3612	4
989	GIBSON GREETINGS	474	894	524	2	41.9	5	8.0	7.8	13.8	15.0	528	8
990	FIRST AMERICAN	474	NR	588	-20	16.9	NM	2.9	NM	NM	4.5	6377	2
991	WETTERAU	473	718	5747	2	49.5	-1	0.9	0.9	9.9	19.1	1271	6
992	SYMBOL TECHNOLOGIES	472	975	319	38	22.8	201	7.1	3.3	8.9	8.7	338	14
993	PUBLIC SERVICE CO. OF NEW MEXICO	470	953	857	-3	24.5	5441	2.9	0.1	4.2	2.0	2349	2
994	AMERICAN PRESIDENT	470	935	2449y	8	64.0	NM	2.6	NM	NM	12.6	1535	-2
995	CILCORP	470	923	590	9	44.9	10	7.6	7.5	8.6	11.8	1148	-1
996	PENTAIR	469	NR	1169	-1	41.1	25	3.5	2.8	9.7	15.1	776	-1
997	MDU RESOURCES GROUP	468	946	367	10	38.0	36	10.4	8.4	8.8	12.5	996	0
998	DIBRELL BROTHERS	466	NR	1059	21	24.5	45	2.3	1.9	13.9	23.1	615	8
999	TCA CABLE TV	466	985	127a	12	8.5	79	6.7	4.2	8.3	12.0	306	-4
1000	PAYCHEX	465	NR	148	15	11.1	25	7.5	6.9	17.8	18.1	79	20

(a) Latest available data. (b) Actual and estimated figures are fully diluted. (c) Estimated earnings data. (d) Earnings data from Institutional Brokers Estimate System. (x) Sales include excise taxes. (y) Sales include other income. (z) Sales include excise taxes and other income. NA=not available. NM=not meaningful. NR=not ranked in Top 1000 in 1991. NEG=negative book value per share. DEF=earnings deficit in dividend payout. † Because BUSINESS WEEK is owned by McGraw-Hill, the Top 1000 does not include a forecast of the company's earnings.



RANK	VALUATION				DIVIDENDS		SHARES			FY	EARNINGS PER SHARE				INDUSTRY GROUP
	12 MONTH HIGH/LOW \$	PRICE AS % OF BOOK VALUE	P/E RATIO	YIELD %	PAYOUT %	TOTAL RETURN %	INST. TUTIONS HOLDING %	SHRS OUT MIL.	TURN OVER %		1990 ACTUAL \$	1991 ACTUAL \$	ANALYSTS' ESTIMATES 1992 EST \$	VARIATION %	
7	31/16	113	11	3.53	39	-3	73	30	113.8	05	1.66	1.55d	2.16	14.8	Electrical C
3	51/34	237	19	7.57	143	34	52	12	50.8	12	2.06	2.29	2.42	2.1	Health care C
4	18/10	NEG	NM	1.40	DEF	-14	33	35	16.4	07	0.12	-0.45	0.07	357.1	Retailing
0	72/54	135	NA	1.29	NA	31	86	7	6.1	12	3.57	NA	NA	NM	Nonbank fin. A
5	27/9	175	23	0.49	11	144	52	20	86.6	11	0.68	1.05	1.48	9.5	Housing B
0	23/15	161	21	2.63	54	3	56	25	84.8	05	0.55	0.96d	1.54	22.1	Office equipment A
5	50/13	456	19	0.53	10	220	45	11	288.3	12	1.60	2.42	2.99	1.7	Nonbank fin. A
1	38/12	465	NA	3.25	NA	96	16	16	102.7	11	0.95	NA	NA	NM	Health care B
9	21/14	202	47	1.81	85	34	45	25	40.9	12	0.30	0.41	0.94	17.0	Manufacturing D
5	26/17	126	35	2.62	91	24	58	19	59.5	12	1.35	0.75	1.54	9.7	Automotive B
3	31/8	724	30	0.96	29	129	47	17	355.0	10	0.92	0.95	1.26	8.7	Office equipment C
4	27/16	225	29	0.00	0	19	66	21	105.3	12	0.58	0.83	0.95	7.4	Services C
9	33/19	277	22	2.01	45	43	58	17	36.5	12	1.06	1.30	1.53	2.0	Nonbank fin. A
3	40/22	303	26	0.00	0	42	76	15	107.3	12	1.07	1.27	1.51	1.3	Office equipment C
2	57/30	NEG	30	0.00	0	70	68	9	45.7	12	1.30	1.75	2.22	5.9	Manufacturing A
3	46/19	334	23	2.06	48	131	49	11	92.4	06	1.36	1.84	2.38	10.5	Manufacturing A
4	43/24	325	22	0.00	0	57	93	12	100.8	12	1.97	1.92	2.40	6.3	Services B
7	45/32	187	13	5.06	66	33	21	12	20.8	12	3.02	3.16	3.16	3.2	Utilities A
7	29/19	204	18	2.26	41	39	27	18	20.1	04	1.30	1.47d	1.88	10.1	Consumer B
3	37/16	995	44	0.00	0	87	91	14	309.3	12	0.55	0.76	0.97	5.2	Leisure A
2	44/32	174	21	1.43	31	14	28	12	4.8	10	1.81	1.83	NA	NM	Containers B
4	39/33	120	11	7.12	78	13	37	14	36.8	12	3.55	3.14	3.76	4.5	Utilities A
2	15/10	108	NM	0.00	0	7	13	41	13.8	12	-0.93	-0.40	NA	NM	Leisure C
2	33/14	354	NM	0.00	0	-18	26	21	790.3	12	-1.68	-1.77	0.67	82.1	Health care B
5	30/10	167	11	0.00	0	-18	74	32	256.7	06	1.00	1.37	0.94	12.8	Health care C
3	41/21	746	NM	0.00	0	NA	32	14	NA	06	NA	0.20	0.70	4.3	Office equipment C
5	18/11	492	18	0.00	0	NA	3	32	NA	01	0.07	0.84d	1.33	3.8	Food C
3	42/32	146	10	3.97	41	19	24	12	32.9	12	3.56	3.67	3.67	1.4	Banks A
0	32/21	170	11	1.21	14	12	82	16	147.5	12	2.51	2.61	2.79	3.6	Leisure D
0	22/9	125	28	0.00	0	129	20	23	66.4	12	-2.69	0.73	1.47	5.4	Banks C
2	31/21	185	11	3.06	33	-22	42	21	65.4	03	2.23	2.05d	2.34	8.5	Food A
0	29/16	180	22	0.00	0	36	76	23	228.8	12	0.33	0.91	1.23	4.1	Office equipment B
1	12/8	64	31	0.00	0	29	39	42	47.2	12	-0.23	0.36	0.65	13.8	Utilities A
2	44/20	104	9	1.86	16	52	93	15	133.3	12	-3.46	3.65	2.88	17.0	Transportation D
3	38/32	140	12	6.79	78	15	16	13	28.1	12	2.69	3.14	3.01	4.7	Utilities A
5	48/29	219	15	2.18	32	60	68	10	125.7	12	2.43b	3.02	3.07	7.8	Manufacturing C
5	25/20	158	13	5.85	73	25	18	19	26.9	12	1.43	1.96	2.01	3.0	Utilities B
5	37/14	438	22	1.36	30	158	38	13	127.4	06	1.11	1.60	1.94	2.6	Consumer E
9	23/15	659	54	1.79	97	19	43	25	51.4	10	0.20	0.35	0.53	7.5	Publishing/TV A
5	41/20	761	35	0.68	24	82	58	13	104.0	05	0.74	1.01d	1.28	7.8	Office equipment C

Data do not include full 12-months' results. Data compiled by Standard & Poor's Compustat Services Inc. from sources such as statistical services, registration statements, and company reports that SPCS believes to be reliable but that are not guaranteed by SPCS or BUSINESS WEEK as to correctness or completeness. This material is not an offer to buy or sell any security. Additional data: Institutional Brokers Estimate System, Institutional Brokers Stock Research Corp.



THE TOP 1000 U.S. COMPANIES RANKED BY INDUSTRY

COMPANY		MARKET VALUE		SALES		PROFITS		ASSETS		RETURN		
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
ALL-INDUSTRY COMPOSITE												
			3375347	13	3860096	2	142866.3	-18	7822826	8	8.8	9.2
1 AEROSPACE												
INDUSTRY COMPOSITE			37165	9	105674	3	2415.6	-15	71512	8	13.2	9.2
1	BOEING	35	15828	-7	29314	6	1567.0	13	16118	15	17.7	19.7
2	UNITED TECHNOLOGIES	116	6232	2	21263	-2	-1020.9	NM	15985	0	NA	-24.1
3	LOCKHEED	271	2819	7	9809	-2	308.0	-8	6617	-4	9.9	12.3
4	MARTIN MARIETTA	291	2646	10	6075	-1	313.1	-4	3897	8	14.9	17.4
5	GENERAL DYNAMICS	303	2520	156	8751	-7	374.0	NM	6207	6	NA	20.5
6	MCDONNELL DOUGLAS	307	2505	61	18488	16	355.0	32	14841	-1	7.7	9.2
7	SUNDSTRAND	450	1570	38	1669	4	108.8	-6	1720	9	14.0	16.7
8	NORTHROP	545	1201	-2	5694	4	268.2	27	3128	1	20.6	23.8
9	GRUMMAN	844	628	25	4038	0	99.3	16	2470	0	10.8	10.4
10	OEA	854	616	121	90	8	13.3	24	95	17	15.7	15.7
11	TELEFLEX	871	601	33	483	9	29.8	4	435	9	12.6	14.5
2 AUTOMOTIVE												
INDUSTRY COMPOSITE			62542	19	275294	-5	-7607.1	NM	431337	0	NM	-12.0
2A CARS & TRUCKS												
GROUP COMPOSITE			47662	9	246601	-5	-7907.3	NM	408012	0	NM	-13.8
1	GENERAL MOTORS	19	22792	-4	123056	-1	-4992.0	NM	184326	2	NM	-18.2
2	FORD MOTOR	31	17338	8	88286	-10	-2258.0	NM	174429	0	NM	-10.0

COMPANY		MARKET VALUE		SALES		PROFITS		ASSETS		RETURN		
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
3	CHRYSLER	173	4709	44	29400	-4	-538.0	NM	43076	-7	NM	-8.7
4	PACCAR	391	1885	39	2339	-16	39.7	-38	2738	-6	NA	3.8
5	NAVISTAR INTERNATIONAL	648	938	-6	3520	-8	-159.0	NM	3443	-9	NM	-56.6
2B PARTS & EQUIPMENT												
GROUP COMPOSITE			6851	33	16202	-6	66.6	-50	13702	-4	3.7	1.0
1	EATON	321	2432	21	3381	-7	62.0	-63	3087	2	6.2	5.4
2	DANA	475	1490	22	4591	-12	13.5	-82	4179	-7	NM	1.4
3	CUMMINS ENGINE	640	952	114	3406	-2	-65.6	NM	2011	-3	NM	-14.7
4	ECHLIN	643	942	35	1681	2	43.6	-3	1219	-5	6.8	6.6
5	MASCO INDUSTRIES	922	542	37	1467	-6	-9.0	NM	2080	-3	NM	-5.8
6	ARVIN INDUSTRIES	970	492	15	1676	-1	22.0	-34	1125	-6	5.5	3.7
2C TIRE & RUBBER												
GROUP COMPOSITE			8028	116	12491	-2	233.5	118	9623	-4	4.7	8.6
1	GOODYEAR TIRE & RUBBER	185	4249	201	10907	-3	74.5	NM	8511	-5	2.0	3.7
2	COOPER TIRE & RUBBER	355	2116	132	1001	12	79.4	20	671	9	16.7	18.1
3	BANDAG	428	1664	20	583	-1	79.6	1	442	13	NA	29.4
3 BANKS												
INDUSTRY COMPOSITE			179081	41	238034	-7	9632.0	-7	2211026	2	11.4	7.5
3A BANKS - EAST												
GROUP COMPOSITE			65434	44	118315	-11	3559.6	60	1044753	2	7.5	6.3
1	J. P. MORGAN	56	10922	33	10314	-2	1114.0	44	103468	11	30.4	19.6
2	CHEMICAL BANKING	135	5679	84	14128	-11	154.0	-65	138930	2	NA	0.4
3	CITICORP	142	5535	8	31839	-17	-914.0	NM	224060	-2	NM	-14.8
4	PNC FINANCIAL	149	5277	84	4470	-8	389.8	450	44892	-1	15.8	11.7
5	BANKERS TRUST NEW YORK	163	4832	30	6844	-14	667.0	0	63959	1	NA	21.7
6	FLEET/NORSTAR FINANCIAL GROUP	221	3376	75	4439	10	97.7	NM	45445	40	NM	3.9
7	CHASE MANHATTAN	246	3077	56	11840	-13	520.0	NM	98197	0	17.4	11.6
8	BANK OF NEW YORK	284	2701	38	4225	-21	122.0	-60	39410	-13	5.6	3.6
9	CORESTATES FINANCIAL	323	2418	28	2495	-4	94.7	53	22849	-2	10.6	15.3
10	STATE STREET BOSTON	338	2317	46	1358	3	139.3	19	15046	29	NA	17.1
11	FIRST FIDELITY BANCORPORATION	341	2286	68	2778	-10	221.2	NM	30215	4	11.6	11.9
12	KEYCORP	349	2176	82	2283	27	188.1	27	23156	20	14.9	14.1
13	REPUBLIC NEW YORK	357	2108	10	2535	-9	227.4	13	31221	5	11.3	13.3
14	MELLON BANK	375	1995	76	3151	-9	280.0	61	29355	2	NA	14.0
15	MBNA	393	1863	37	1134	31	149.2	16	6009	31	NA	26.0
16	BANK OF BOSTON	499	1401	149	4547	-20	-34.4	NM	32700	1	NA	-3.4
17	MERIDIAN BANCORP	566	1126	79	1213	-5	107.1	121	11337	-4	16.9	13.5
18	SHAWMUT NATIONAL	624	977	104	2344	-15	-170.7	NM	22816	-4	NM	-17.2
19	WILMINGTON TRUST	670	890	21	429	0	71.9	7	4061	6	27.2	20.8
20	INTEGRA FINANCIAL	682	862	93	802	8	70.2	169	8847	16	15.4	12.6
21	FIRST EMPIRE STATE	692	848	94	851	19	67.2	25	9171	19	16.1	13.0
22	UJB FINANCIAL	710	809	84	1255	-7	22.4	NM	13378	4	NM	2.6
23	MERCANTILE BANKSHARES	721	786	7	512	4	NA	NA	5183	6	NA	13.5
24	MNC FINANCIAL	791	699	96	2194	-32	-70.2	NM	17438	-34	NM	-7.1
25	DAUPHIN DEPOSIT	988	476	10	334	0	45.7	1	3612	4	17.4	14.1
3B BANKS - MIDWEST												
GROUP COMPOSITE			47107	47	42169	-4	3326.2	12	416926	3	15.3	11.5
1	BANC ONE	81	8324	56	4154	18	529.5	25	33180	17	17.9	16.4
2	NORWEST	178	4588	49	4420	7	398.5	260	38502	4	NA	17.5
3	NBD BANCORP	216	3463	31	2724	-3	293.0	1	29513	5	18.2	14.7
4	FIFTH THIRD BANCORP	281	2721	74	885	6	138.2	15	8826	11	NA	15.7
5	NATIONAL CITY	309	2482	12	2588	-4	231.0	-1	24170	2	14.0	12.7
6	FIRST BANK SYSTEM	372	2019	47	1821	-15	190.4	46	18301	-4	13.7	14.5
7	FIRST CHICAGO	377	1970	26	4830	-15	116.3	-53	48963	-4	NA	3.3
8	SOCIETY	397	1841	48	1609	-6	163.0	5	15405	2	19.9	14.9
9	COMERICA	401	1815	98	1401	2	153.4	12	14451	5	15.4	14.8
10	NORTHERN TRUST	406	1768	48	1260	-5	127.4	10	13193	12	NA	18.1



	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
11	FIRSTAR	436	1628	67	1254	1	134.3	14	12309	2	16.3	14.2
12	BOATMEN'S BANCSHARES	438	1624	24	1588	5	150.1	11	17635	1	14.0	11.2
13	MANUFACTURERS NATIONAL	486	1439	70	1160	0	120.2	11	13544	12	23.7	14.8
14	AMERITRUST	505	1368	176	1119	-13	-86.5	NM	10181	-8	NM	-15.5
15	HUNTINGTON BANCSHARES	533	1260	35	1219	-3	117.0	37	12333	4	18.8	14.0
16	MARSHALL & ILSLEY	559	1138	69	835	0	99.3	39	7628	2	15.8	15.0
17	OLD KENT FINANCIAL	583	1081	62	862	-1	93.0	6	8826	8	16.1	14.2
18	FIRST OF AMERICA BANK	595	1045	18	1434	3	134.9	2	16755	19	11.5	13.2
19	STAR BANC	695	838	25	659	-1	65.8	1	6646	6	NA	12.1
20	CONTINENTAL BANK	709	813	41	2301	-25	-73.0	NM	24008	-12	NA	-9.7
21	MERCANTILE BANCORPORATION	789	704	59	776	2	66.6	17	8089	6	15.0	12.2
22	COMMERCE BANCSHARES	792	698	55	594	-1	59.8	4	6765	1	NA	11.8
23	MERCHANTS NATIONAL	824	659	158	537	-6	5.8	-63	5806	0	NM	1.8
24	INB FINANCIAL	829	651	50	643	-2	48.1	18	6556	5	14.7	10.4
25	MICHIGAN NATIONAL	833	639	94	1097	-11	50.1	4	10650	-3	NA	6.7
26	UNITED MISSOURI BANCSHARES	927	531	48	397	-3	NA	NA	4692	10	NA	10.4

3C BANKS - SOUTH & SOUTHEAST

	GROUP COMPOSITE		37394	44	37274	0	1995.1	-13	372722	2	16.9	9.3
1	NATIONSBANK	59	10319	38	11594	-3	201.9	-66	110319	-5	17.4	4.6
2	WACHOVIA	160	4853	12	3138	-2	229.5	-34	33158	0	22.7	11.0
3	SUNTRUST BANKS	164	4809	44	3361	-1	370.7	6	34554	3	17.5	14.8
4	FIRST UNION	186	4222	75	4321	6	318.7	5	46085	13	15.9	10.6
5	BARNETT BANKS	339	2311	51	3274	0	123.8	85	32721	2	NA	6.5
6	AMSOUTH BANCORPORATION	635	958	60	900	0	80.4	5	9459	9	14.8	11.4
7	SOUTHTRUST	642	944	72	933	7	90.0	29	10158	13	17.7	14.3
8	FIRST ALABAMA BANCSHARES	667	896	19	659	8	78.3	14	6745	6	NA	13.7
9	FIRST VIRGINIA BANKS	697	832	43	588	3	69.6	7	6119	14	NA	13.2
10	SIGNET BANKING	712	807	109	1305	-9	-25.7	NM	11239	-1	NA	-3.6
11	CENTRAL FIDELITY BANKS	716	791	108	639	6	60.4	8	6806	10	21.9	14.5
12	CRESTAR FINANCIAL	718	790	30	1213	-4	33.8	-45	11828	0	13.2	4.2
13	FIRST TENNESSEE NATIONAL	762	732	83	756	2	63.8	33	7904	18	19.3	14.9
14	BANPONCE	772	722	42	927	46	64.6	2	8780	-2	NA	10.5
15	CENTRAL BANCSHARES OF THE SOUTH	820	665	81	572	12	59.4	21	6122	25	23.9	15.1
16	BB&T FINANCIAL	861	608	36	594	6	60.2	12	6229	21	14.3	12.7
17	SYNOVUS FINANCIAL	886	581	12	488	21	40.5	13	4070	33	12.0	13.7
18	DOMINION BANCSHARES	912	559	63	1030	-7	20.6	NM	9711	-6	NM	3.5
19	LIBERTY NATIONAL BANCORP	938	519	70	396	6	37.8	15	4338	17	15.0	11.8
20	FIRST AMERICAN	990	474	132	588	-20	16.9	NM	6377	-2	NM	4.5

3D BANKS - WEST & SOUTHWEST

GROUP COMPOSITE		29146	21	40277	-6	751.1	-74	376625	-1	4.4	2.9	
1	BANKAMERICA	71	9467	33	12268	0	1124.0	28	115509	4	12.6	15.8
2	SECURITY PACIFIC	168	4788	34	8922	-14	-774.5	NM	76411	-10	NM	-22.6
3	FIRST INTERSTATE BANCORP	202	3875	10	5120	-15	-288.1	NM	48922	-5	NM	-16.0
4	WELLS FARGO	228	3341	-19	5861	-2	21.0	-97	53547	-5	NA	0.1
5	U.S. BANCORP	364	2074	27	2014	0	196.4	3	18875	2	NA	13.9
6	BANCORP HAWAII	497	1411	45	1023	7	112.7	18	11409	7	20.2	16.1
7	FIRST HAWAIIAN	691	850	4	578	7	81.7	14	6511	18	16.3	16.4
8	FIRST SECURITY	744	756	87	707	1	59.6	30	7015	8	NA	10.5
9	VALLEY NATIONAL	781	710	80	1132	-1	34.6	361	10652	1	8.5	6.6
10	PUGET SOUND BANCORP	790	702	80	500	3	49.1	6	4884	6	15.2	14.7

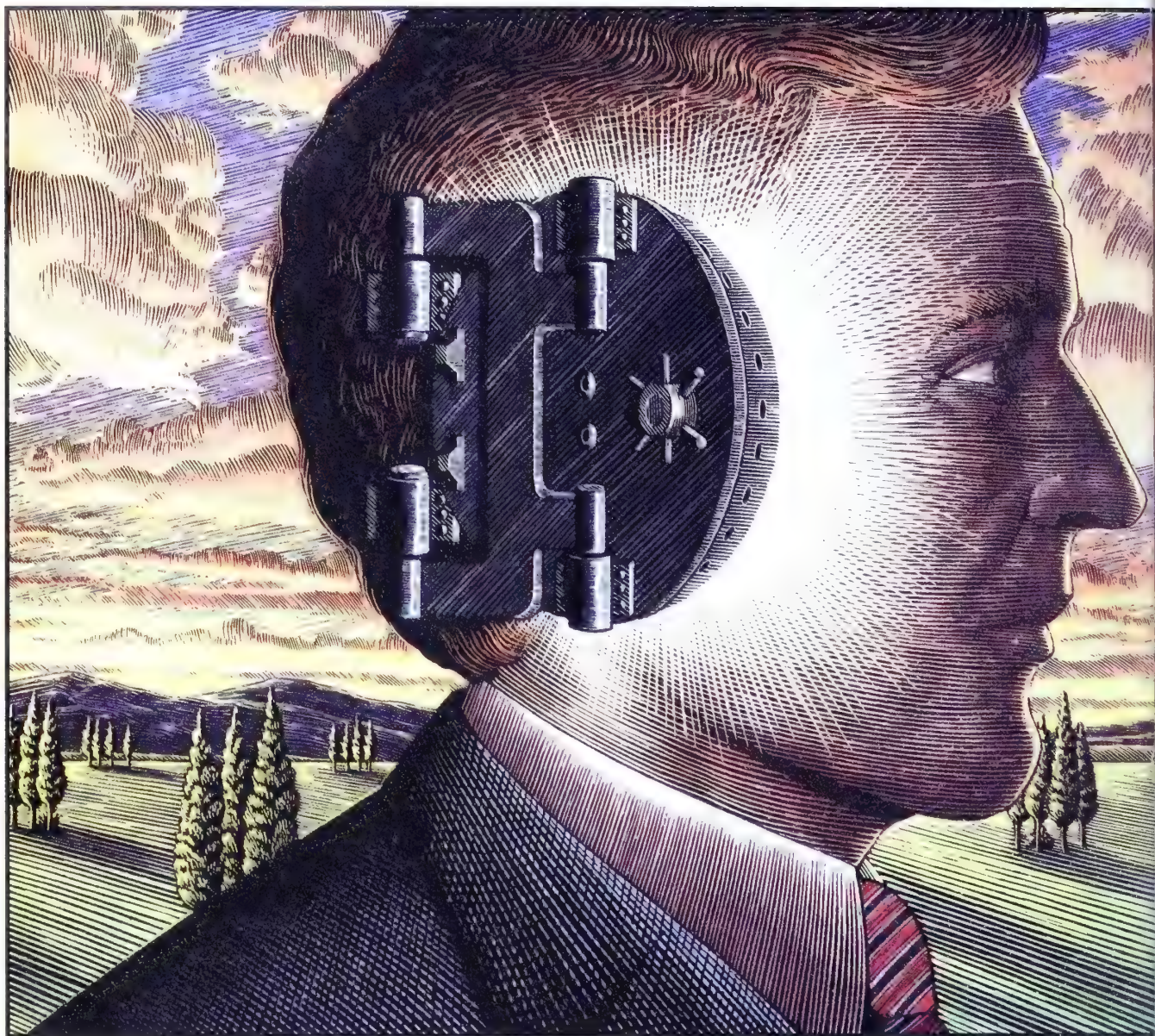
	COMPANY	MARKET VALUE		SALES		PROFITS		ASSETS		RETURN		
		TOP 1000 RANK	\$ M.	CHANGE FROM 1991	12 MONTHS 1991 \$ M.	CHANGE FROM 1990	12 MONTHS 1991 \$ M.	CHANGE FROM 1990	12 MONTHS 1991 \$ M.	CHANGE FROM 1990	ON INVESTED CAPITAL	ON COMMON EQUITY
11	UNION BANK	823	663	-13	1633	-3	93.5	-36	17474	7	NA	9.2
12	WEST ONE BANCORP	955	509	36	520	3	41.2	-7	5417	10	15.1	11.2

4 CHEMICALS

	INDUSTRY COMPOSITE		118015	19	129729	-3	5497.0	-32	137445	1	9.0	9.6
1	DUPONT	12	29535	16	38695	-3	1403.0	-39	36117	-5	7.8	8.2
2	DOW CHEMICAL	40	15292	7	18807	-5	942.0	-32	24727	3	10.0	9.7
3	MONSANTO	82	8311	7	8864	-1	296.0	-46	9227	0	7.7	7.5
4	AMERICAN CYANAMID	124	5875	13	4986	9	358.8	233	5189	0	13.0	13.6
5	AIR PRODUCTS & CHEMICALS	162	4840	27	2967	0	252.5	5	4417	10	10.8	13.0
6	W. R. GRACE	203	3799	44	6049	1	219.2	8	6007	-4	9.1	11.4
7	GREAT LAKES CHEMICAL	207	3688	27	1308	23	157.5	12	1649	17	24.5	18.8
8	ARCO CHEMICAL	212	3548	1	2837	0	188.0	-39	3679	-2	8.5	11.4
9	ROHM & HAAS	223	3354	17	2763	-2	163.1	-21	2808	7	9.7	12.4
10	UNION CARBIDE	242	3142	24	4877	-7	-116.0	NM	5138	-11	NM	-6.0
11	FREEPORT-MCMORAN	245	3081	41	1579	0	96.7	-69	3565	15	11.6	NA
12	MORTON INTERNATIONAL	253	2971	29	1967	9	143.4	3	2007	6	11.6	12.3
13	ETHYL	259	2943	-16	2575	2	206.7	-11	7905	18	12.2	16.9
14	NALCO CHEMICAL	322	2421	13	1237	16	134.6	6	1324	28	16.4	25.0
15	MERCULES	327	2376	22	2929	-8	94.9	-1	3467	-6	5.8	5.0
16	LUBRIZOL	345	2218	20	1476	2	123.7	-35	1172	5	15.5	15.6
17	LYONDELL PETROCHEMICAL	400	1830	-2	5729	-12	222.0	-38	1479	8	32.3	182.0
18	ENGELHARD	425	1675	52	2436	-17	87.9	25	1256	-5	12.0	11.6
19	LOCTITE	426	1669	33	561	1	71.9	7	529	8	19.7	19.9
20	BETZ LABORATORIES	439	1623	11	666	12	75.5	15	476	11	21.2	27.6
21	A. SCHULMAN	469	1502	95	708	-3	42.0	10	384	3	16.2	16.7
22	IMC FERTILIZER GROUP	512	1340	25	1100	-3	90.0	2	1884	15	8.0	12.2
23	INTERNATIONAL SPECIALTY PRODUCTS	525	1286	NA	528	5	43.0	62	1075	1	9.6	9.3
24	B. F. GOODRICH	542	1216	11	2472	2	-80.6	NM	2425	6	NM	-7.3
25	WITCO	613	1010	26	1631	0	73.5	8	1198	2	10.2	12.2
26	OLIN	621	982	9	2275	-12	-12.7	NM	2012	8	NM	-3.6
27	CROMPTON & KNOWLES	647	940	52	450	15	35.9	20	309	9	21.1	27.0
28	WELLMAN	653	923	27	806	-3	45.3	-26	865	-3	8.7	10.9
29	GEORGIA GULF	680	864	63	838	-10	61.5	-36	416	-9	50.4	NM
30	FERRO	728	782	68	1057	-6	4.8	-75	672	-2	1.7	NA
31	CABOT	764	731	18	1467	-7	42.7	6	1571	-14	7.3	10.0
32	M. A. HANNA	880	588	-4	1146	3	-16.7	NM	1033	-3	NM	-4.7
33	H. B. FULLER	911	560	67	853	8	27.7	31	509	4	NA	13.3
34	LAWTER INTERNATIONAL	913	559	25	153	2	26.5	13	171	18	NA	23.9
35	DEXTER	921	543	-10	938	3	-7.1	NM	784	3	-0.5	-2.3

5 CONGLOMERATES

	INDUSTRY COMPOSITE		115313	11	163964	0	5467.2	-35	340555	6	11.8	10.1
1	GENERAL ELECTRIC	3	66969	15	59379	3	4435.0	3	168259	9	21.2	20.5
2	ITT	93	7307	13	20421	-1	817.0	-23	51880	8	7.9	9.8
3	ALLIED-SIGNAL	102	6769	68	11831	-4	-273.0	NM	10382	-1	NM	-9.2
4	ROCKWELL INTERNATIONAL	121	5914	-12	11549	-7	582.3	-6	9236	-3	13.2	13.8
5	TENNECO	161	4845	-21	13662	-6	-674.0	NM	18696	-2	NM	-30.9
6	TEXTRON	236	3196	21	7840	-1	299.5	6	15740	6	7.4	10.5
7	TRW	288	2666	6	7913	-3	-140.0	NM	5635	1	NA	-7.3
8	PALL	329	2359	28	669	10	81.2	15	780	4	16.1	16.3
9	HOUSEHOLD INTERNATIONAL	354	2118	23	4594	6	149.8	-36	29982	2	NA	7.7
10	DIAL	376	1990	68	3569	1	122.4	5	5401	4	8.3	11.1
11	ALCO STANDARD	430	1663	27	4807	3	91.7	18	1948	-5	NA	10.9
12	GENERAL CINEMA	437	1625	-3	3584	-2	-257.2	NM	6208	102	-11.0	-56.9
13	WHITMAN	453	1549	-37	2393	4	80.4	NM	2123	-37	10.9	17.8
14	PREMARK INTERNATIONAL	460	1523	121	2816	3	102.3	97	1986	-5	11.7	13.2
15	TELEDYNE	481	1462	18	3207	-7	-25.4	NM	1719	3	NM	-5.6
16	PENN CENTRAL	578	1092	-13	1669	54	63.4	-15	3383	1	4.5	4.0
17	ODGEN	620	983	9	1568	1	57.6	-1	2856	5	5.0	11.8
18	VALHI	805	683	-25	766	0	20.1	-73	1177	-64	7.7	5.2
19	ITEL	874	597	0	1728	-6	-65.8	NM	3162	-25	NA	-16.4



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We now total \$139 billion in assets and \$8.8 billion in shareholders' equity.

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a competitive edge—to convince you as a client to choose us over other institutions.

It takes the experience, intelligence and ingenuity our people use to solve problems—a combination of knowledge and drive we call intellectual currency. Without the energizing spark of intellectual currency, capital strength can't be used to its full potential.

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Intellectual currency and capital strength. They are in place at all our locations now—to dissolve obstacles, create momentum, and help you build what you want to build.

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COMPANY	MARKET VALUE		SALES		PROFITS		ASSETS		RETURN	
	TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ M-L	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %

6 CONSUMER PRODUCTS

INDUSTRY COMPOSITE		297210	19	217006	8	14079.6	13	212714	5	14.4	21.7
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6A APPAREL

GROUP COMPOSITE		20374	38	14133	16	1160.3	18	9781	9	19.6	22.7
1 NIKE	146	5375	36	3212	20	305.3	6	1746	19	25.8	25.5
2 LIZ CLAIBORNE	218	3428	-12	2007	16	222.7	8	1072	19	NA	25.3
3 REEBOK INTERNATIONAL	251	2991	8	2734	27	234.7	33	1431	2	23.7	30.6
4 FRUIT OF THE LOOM	308	2504	206	1514	5	82.7	-11	2131	-1	NA	12.9
5 VF	324	2409	63	2952	13	161.3	99	2127	15	13.4	19.1
6 RUSSELL	471	1496	42	805	13	56.8	-16	818	3	10.3	11.8
7 STRIDE RITE	482	1461	48	574	11	66.0	19	332	25	27.1	27.4
8 JONES APPAREL GROUP	782	710	NA	334	16	30.8	65	123	NA	38.8	42.8

6B APPLIANCES & HOME FURNISHINGS

GROUP COMPOSITE		15235	32	21116	2	597.8	-11	18210	4	6.8	8.2
1 MASCO	196	4002	20	3141	-2	44.9	-68	3786	1	3.3	2.5
2 WHIRLPOOL	255	2967	55	6770	2	170.0	136	6162	7	NA	11.4
3 MAYTAG	378	1967	33	2971	-3	79.0	-20	2535	-2	7.1	7.8
4 CIRCUIT CITY STORES	462	1516	87	2628	13	60.9	-8	1204	18	13.8	15.2
5 ARMSTRONG WORLD INDUSTRIES	548	1183	18	2439	-3	60.6	-59	2140	1	6.2	6.5
6 LEGGETT & PLATT	742	759	34	1082	-1	39.4	34	656	-3	9.4	12.2
7 ROYAL APPLIANCE MFG.	801	687	NA	273	128	27.4	299	121	96	NA	NA
8 HEILIG-MEYERS	862	608	110	487	11	24.2	16	586	14	9.8	9.4
9 NATIONAL PRESTO INDUSTRIES	903	564	68	162	27	36.7	26	254	8	16.5	16.7
10 KIMBALL INTERNATIONAL	960	502	17	553	-6	29.9	-24	396	4	9.9	9.8
11 LA-Z-BOY CHAIR	979	480	34	610	0	24.9	-4	370	5	9.6	10.6

6C BEVERAGES

GROUP COMPOSITE		97630	17	49347	8	3721.4	4	48817	11	15.6	21.9
1 COCA-COLA	6	52411	50	11572	13	1618.0	17	10222	10	33.3	38.3
2 PEPSICO	15	25054	-2	19608	10	1080.2	-1	18783	10	12.0	20.8
3 ANHEUSER-BUSCH	39	15619	17	10996	2	939.8	12	9960	4	15.6	21.8
4 BROWN-FORMAN	365	2063	1	1203	9	141.9	-1	1223	15	18.4	20.5
5 COCA-COLA ENTERPRISES	408	1767	-11	4051	0	-82.4	NM	6677	33	NM	-6.5
6 ADOLPH COORS	776	716	-18	1917	4	23.9	-39	1952	16	NA	2.1

6D PERSONAL CARE

GROUP COMPOSITE		67910	20	50421	8	3138.3	-5	40076	10	15.3	23.4
1 PROCTER & GAMBLE	10	33558	11	28229	9	1787.0	3	23733	15	15.7	25.4
2 GILLETTE	58	10483	38	4684	8	427.4	16	3543	5	27.5	41.6
3 COLGATE-PALMOLIVE	112	6332	27	6060	6	124.9	-61	4324	7	7.3	11.6
4 INTERNATIONAL FLAVORS & FRAGRANCES	197	3960	22	1017	6	168.7	8	1217	8	18.9	18.3
5 AVON PRODUCTS	226	3345	36	3593	4	210.7	8	1729	-16	NA	76.5
6 TAMBRANDS	292	2629	8	661	5	79.0	-19	382	-1	31.2	31.5
7 CLOROX	301	2547	18	1679	8	62.2	-56	1484	-4	7.6	7.6
8 ECOLAB	598	1040	66	918	-9	55.7	-4	1220	21	8.4	9.1
9 BLOCK DRUG	610	1012	17	549	11	56.4	11	618	16	12.5	13.1
10 ALBERTO-CULVER	807	681	-7	930	15	31.5	-14	562	32	9.5	12.1
11 STANHOME	825	658	-18	710	5	45.1	-12	419	7	21.4	20.2
12 NEUTROGENA	887	580	36	239	13	22.1	60	159	17	20.8	20.8

	COMPANY	MARKET VALUE		SALES		PROFITS		ASSETS		RETURN		
		TOP 100 RANK	\$ MIL.	CHANGE FROM 1991	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990	ON INVESTED CAPITAL	ON COMMON EQUITY
13	CHURCH & DWIGHT	898	570	21	485	13	26.5	14	237	-11	19.2	19.8
14	NCH	943	515	-7	666	-1	41.2	-3	449	7	15.5	16.2

6E TOBACCO

	GROUP COMPOSITE		96061	14	81989	7	5461.7	38	95831	0	14.0	24.5
1	PHILIP MORRIS	2	68770	11	48064	8	3927.0	11	47384	2	17.2	31.4
2	RJR NABISCO HOLDINGS	54	11217	33	14989	8	368.0	NM	32131	-2	7.9	4.7
3	AMERICAN BRANDS	77	8940	-4	14064	2	806.1	37	13727	0	15.6	20.0
4	UST	130	5749	27	907	19	265.9	19	657	5	56.1	56.1
5	UNIVERSAL	656	920	96	2907	4	70.2	79	1318	-7	23.0	24.1
6	DIBRELL BROTHERS	998	466	129	1059	21	24.5	45	615	8	13.9	23.1

7 CONTAINERS & PACKAGING

	INDUSTRY COMPOSITE		15036	34	19904	11	582.8	-29	28370	15	6.5	7.2
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7A GLASS, METAL & PLASTIC

	GROUP COMPOSITE		3594	43	6075	37	194.3	24	4484	18	10.0	12.1
1	CROWN CORK & SEAL	293	2620	42	3807	24	128.1	20	2906	3	10.8	12.4
2	BALL	627	974	62	2267	67	66.2	32	1578	66	8.7	11.5

7B PAPER

	GROUP COMPOSITE		11443	32	13829	-2	388.4	-41	23886	14	5.8	5.8
1	TEMPLE-INLAND	262	2904	40	2507	4	138.4	-40	10068	29	6.6	9.1
2	STONE CONTAINER	381	1962	122	5384	-6	-49.1	NM	6903	3	NM	-3.5
3	SONOCO PRODUCTS	418	1708	3	1697	2	94.8	88	1136	2	14.1	16.9
4	ST. JOE PAPER	539	1220	13	582	-5	27.6	-33	1342	2	3.4	3.4
5	FEDERAL PAPER BOARD	543	1210	16	1435	4	82.4	-30	2470	16	6.7	NA
6	BEMIS	560	1134	16	1142	1	53.0	4	719	4	13.5	17.1
7	LONGVIEW FIBRE	701	827	28	644	-4	19.1	-62	920	6	4.9	5.1
8	GREIF BROS.	981	477	18	437	0	22.2	1	327	10	8.1	8.1

8 DISCOUNT & FASHION RETAILING

	INDUSTRY COMPOSITE		194794	30	282996	12	8052.2	4	221856	12	11.5	14.1
1	WAL-MART STORES	4	60954	49	43887	35	1608.5	25	15443	36	18.6	25.1
2	SEARS, ROEBUCK	38	15785	44	57242	2	1144.9	28	106435	11	12.6	8.7
3	HOME DEPOT	48	12957	116	5137	35	249.2	52	2510	53	13.1	15.6
4	KMART	61	10088	25	34969	8	859.0	14	15999	15	11.1	15.5
5	TOYS 'R' US	67	9831	24	6124	11	339.5	4	4958	14	14.7	15.7
6	THE LIMITED	68	9808	7	6149	17	403.3	1	3536	18	16.8	23.7
7	J. C. PENNEY	96	7225	12	17295	-1	528.0	-9	12520	2	9.1	13.3
8	MAY DEPARTMENT STORES	98	7202	8	10615	5	515.0	3	8636	8	11.5	22.8
9	THE GAP	108	6409	83	2519	30	229.9	59	1147	48	30.4	33.9
10	MELVILLE	151	5162	-1	9886	14	346.7	-10	4229	4	NA	21.9
11	DAYTON HUDSON	172	4737	-3	16115	9	301.0	-27	9485	11	8.6	12.4
12	DILLARD DEPARTMENT STORES	174	4691	21	4036	12	206.2	13	3499	16	10.8	13.9
13	COSTCO WHOLESALE	187	4204	77	5614	27	91.5	63	1331	33	13.1	12.9
14	WOOLWORTH	204	3746	-14	9914	1	-53.0	NM	5292	8	NM	-2.3
15	NORDSTROM	237	3192	15	3180	10	135.8	17	2042	7	12.1	15.0
16	AUTOZONE	304	2519	NA	868	25	49.2	82	418	20	22.5	21.8
17	PRICE	314	2469	18	7056	22	137.4	7	2089	39	11.6	16.8
18	CHARMING SHOPPES	456	1536	108	1021	15	58.3	45	663	27	16.5	17.3
19	LOWE'S	485	1447	27	3056	8	6.5	-91	1441	20	NM	1.0
20	MERCANTILE STORES	489	1437	5	2442	3	114.0	-8	1735	4	8.9	9.4
21	TJX	536	1248	1	2758	13	70.1	-5	1105	6	15.1	26.9
22	PEP BOYS-MANNY, MOE & JACK	557	1150	80	971	9	36.0	-9	833	10	7.9	9.7
23	PETRIE STORES	593	1052	11	1343	4	8.0	-67	878	-1	1.9	1.3
24	FAMILY DOLLAR STORES	603	1026	119	1029	15	44.1	44	435	19	18.7	18.7
25	DUTY FREE INTERNATIONAL	608	1018	139	188	79	23.8	63	199	59	14.4	19.7
26	SERVICE MERCHANDISE	676	876	89	3400	-1	76.1	25	1807	-1	18.0	499.3
27	EDISON BROTHERS STORES	715	791	20	1367	14	61.3	1	843	10	13.9	17.0
28	TIFFANY	745	753	3	492	8	31.8	-13	395	29	13.1	16.5
29	FINGERHUT	761	733	42	1428	14	53.6	12	737	37	15.1	15.7



	COMPANY	MARKET VALUE		SALES		PROFITS		ASSETS		RETURN			
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	
30	HOME SHOPPING NETWORK		763	732	56	1079	3	-8.5	NM	583	3	-8.5	-4.8
31	SPIEGEL		768	728	-29	1976	-1	16.9	-73	1725	-1	4.6	3.8
32	CONSOLIDATED STORES		806	682	198	753	14	20.1	342	343	-2	11.7	13.1
33	U.S. SHOE		809	679	19	2737	-1	-28.8	NM	1177	-7	NM	-5.7
34	WABAN		812	675	52	2784	16	30.0	63	786	36	7.2	7.7
35	FRED MEYER		848	620	72	2703	9	45.2	35	973	7	NA	13.5
36	CML GROUP		850	618	168	402	29	29.9	65	191	5	26.7	32.9
37	FILENE'S BASEMENT		865	606	NA	444	NA	NA	NA	193	28	NA	NA
38	VALUE CITY DEPARTMENT STORES		867	603	NA	639	15	27.1	61	263	NA	22.7	22.8
39	PIC 'N' SAVE		900	569	71	545	NA	31.8	NA	387	-2	12.7	15.6
40	MERRY-GO-ROUND ENTERPRISES		901	567	-31	732	24	39.2	13	335	39	NA	19.7
41	LANDS' END		915	557	43	641	11	23.4	44	274	41	NA	20.8
42	DIAGNOSTEK		920	547	76	278	33	11.2	57	212	82	7.6	7.3
43	HECHINGER		926	531	58	1608	15	26.1	12	934	13	5.2	5.1
44	VENTURE STORES		942	515	104	1522	7	41.5	20	509	13	22.1	33.5
45	DOLLAR GENERAL		947	513	134	713	11	18.1	40	297	10	11.0	13.1
46	SHOPKO STORES		959	504	NA	1586	NA	49.2	NA	841	5	11.7	16.3
47	NEIMAN MARCUS GROUP		963	500	-7	1755	2	4.2	-81	1193	4	3.5	NM

9 ELECTRICAL & ELECTRONICS

INDUSTRY COMPOSITE		98677	16	115830	3	3097.1	-35	112685	0	6.6	6.1
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9A ELECTRICAL PRODUCTS

GROUP COMPOSITE		31120	8	30688	-1	100.7	-93	37550	-4	1.4	0.4
1 EMERSON ELECTRIC	52	11911	25	7443	-4	637.7	3	6562	2	18.4	18.8
2 WESTINGHOUSE ELECTRIC	103	6742	-20	12794	-1	-1086.0	NM	20159	-9	NM	-38.6
3 COOPER INDUSTRIES	109	6381	16	6163	-1	393.2	9	7149	0	10.1	10.7
4 HUBBELL	424	1680	12	756	5	90.6	5	670	10	17.7	17.9
5 RAYCHEM	504	1374	29	1273	6	-24.1	NM	1330	-2	NM	-3.4
6 NATIONAL SERVICE INDUSTRIES	535	1257	-6	1599	-3	25.3	-75	1023	7	4.0	3.8
7 THOMAS & BETTS	590	1067	17	566	-5	48.5	0	600	2	11.2	13.3
8 AMERICAN POWER CONVERSION	786	708	250	94	58	15.6	67	58	62	39.5	42.2

9B ELECTRONICS

GROUP COMPOSITE		24085	15	47058	4	2011.0	-9	40786	2	9.9	9.7
1 MOTOROLA	63	9948	17	11341	4	454.0	-9	9375	7	9.8	9.8
2 RAYTHEON	117	6047	19	9274	0	591.7	6	6087	-1	20.5	18.5
3 LITTON INDUSTRIES	389	1902	7	5463	6	68.4	-60	5090	-5	5.9	5.6
4 GM HUGHES ELECTRONICS	NR	1321	-23	11481	-1	505.0	-30	12931	2	6.5	6.1
5 HARRIS	538	1232	19	2997	-2	89.7	149	2417	-7	9.0	8.6
6 E-SYSTEMS	574	1101	-3	1991	10	109.5	16	1067	16	14.3	15.2
7 LORAL	596	1043	7	2870	60	112.1	32	2509	3	11.1	11.8
8 VARIAN ASSOCIATES	731	774	-4	1366	5	52.7	214	875	-3	11.3	12.3
9 SENSORMATIC ELECTRONICS	775	717	62	274	29	27.8	28	435	52	7.3	11.6

9C INSTRUMENTS

GROUP COMPOSITE		13375	20	18661	0	136.8	-61	15375	-5	1.4	2.3
1 HONEYWELL	156	5039	17	6193	-2	331.1	-11	4807	1	16.8	19.3
2 JOHNSON CONTROLS	455	1539	37	4626	1	99.0	12	2832	1	8.3	10.2
3 PERKIN-ELMER	563	1131	20	868	1	-4.9	NM	816	-7	-1.4	0.0
4 THERMO ELECTRON	580	1084	48	805	12	47.1	35	1085	26	NA	10.5
5 MILLIPORE	616	992	-12	748	6	60.4	117	784	7	11.4	12.6

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RANK	COMPANY	MARKET VALUE		SALES		PROFITS		ASSETS		RETURN		
		1991	1990	CHANGE FROM 1990	1991	CHANGE FROM 1990	1991	CHANGE FROM 1990	1991	CHANGE FROM 1990	ON INVESTED CAPITAL	ON COMMON EQUITY
		\$ MIL.	\$ MIL.	%	\$ MIL.	%	\$ MIL.	%	\$ MIL.	%	%	%
6	AMETEK	754	742	38	715	8	38.0	2	597	-3	NA	18.7
7	THERMO INSTRUMENT SYSTEMS	838	633	26	339	19	24.8	31	498	32	7.8	11.5
8	BECKMAN INSTRUMENTS	851	618	25	858	5	38.1	5	712	5	11.8	11.1
9	TERADYNE	897	572	86	509	11	18.3	NM	421	8	7.3	6.2
10	HENLEY GROUP	934	523	44	1689	-7	-560.0	NM	1935	-39	NM	NM
11	TEKTRONIX	961	502	-23	1311	-6	44.9	NM	888	-2	10.2	10.1

9D SEMICONDUCTORS

GROUP COMPOSITE		30098	26	19424	9	848.7	4	18974	8	7.5	7.2	
1	INTEL	49	12699	24	4779	22	818.6	26	6292	17	18.4	18.5
2	AMP	106	6508	16	3095	2	259.3	-10	3007	3	14.5	13.6
3	TEXAS INSTRUMENTS	268	2834	-22	6784	3	-409.0	NM	5009	-1	NM	-27.9
4	MOLEX	412	1743	25	740	14	63.3	-4	773	16	10.0	10.2
5	ADVANCED MICRO DEVICES	487	1439	86	1227	16	145.3	NM	1292	16	NM	17.2
6	NATIONAL SEMICONDUCTOR	570	1117	42	1656	-4	-150.4	NM	1065	-12	NM	-32.6
7	MICRON TECHNOLOGY	784	709	17	457	32	15.0	NM	710	7	3.4	3.0
8	VICOR	803	684	249	56	51	11.2	121	78	182	17.8	18.2
9	XILINX	842	629	22	130	56	22.8	71	138	36	21.4	22.1
10	LINEAR TECHNOLOGY	853	616	106	107	29	20.7	49	134	29	19.7	20.2
11	CYPRESS SEMICONDUCTOR	860	610	-10	287	27	34.2	3	375	21	11.4	11.4
12	ALTERA	952	510	46	107	36	17.8	33	102	36	21.9	21.9

10 FOOD

INDUSTRY COMPOSITE		161762	5	299685	4	8713.7	43	132077	8	14.4	21.5
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10A FOOD DISTRIBUTION

GROUP COMPOSITE		7685	7	37862	6	490.7	11	9085	5	10.9	14.6	
1	SYSCO	191	4128	13	8469	8	161.6	11	2263	5	12.3	16.1
2	SUPER VALU STORES	384	1952	-2	10744	3	207.3	37	2581	1	15.1	18.9
3	FLEMING	561	1132	3	12902	8	72.3	-26	2971	10	6.6	7.0
4	WETTERAU	991	473	-27	5747	2	49.5	-1	1271	6	9.9	19.1

10B FOOD PROCESSING

GROUP COMPOSITE		122076	7	137460	5	6668.6	21	85855	10	15.5	20.7	
1	KELLOGG	47	13708	37	5787	12	606.0	21	3933	5	30.1	28.9
2	SARA LEE	51	12203	43	12651	4	714.7	43	9754	25	15.6	23.7
3	GENERAL MILLS	55	10964	22	7486	9	492.6	18	4240	14	25.0	38.0
4	H. J. HEINZ	73	9392	-3	6553	1	648.7	19	6172	23	27.1	28.5
5	CAMPBELL SOUP	74	9309	4	6133	-3	450.9	697	4376	2	19.2	23.5
6	ARCHER DANIELS MIDLAND	78	8818	29	8801	5	499.1	9	6964	15	10.7	11.7
7	CONAGRA	110	6376	10	20485	15	345.4	25	10667	7	12.2	15.5
8	CPC INTERNATIONAL	114	6302	2	6189	7	404.2	8	4510	0	NA	29.3
9	RALSTON PURINA	126	5864	3	7448	4	387.3	-3	4775	6	15.0	41.3
10	QUAKER OATS	167	4792	11	5570	5	256.6	13	2844	-8	18.5	30.0
11	BORDEN	171	4738	-6	7235	-5	294.9	-19	5481	4	11.0	14.9
12	HERSHEY-FOODS	206	3709	4	2899	7	219.5	2	2342	13	15.0	16.4
13	WM. WRIGLEY JR.	269	2828	21	1149	3	128.7	10	625	11	27.9	27.8
14	GERBER PRODUCTS	298	2570	21	1209	3	106.4	-6	838	5	20.6	24.2
15	TYSON FOODS	326	2405	-8	3978	4	148.5	18	2598	2	11.9	17.4
16	PET	348	2190	NA	1878	-1	99.6	NM	1532	0	11.0	18.7
17	MCCORMICK	352	2141	57	1428	8	80.9	17	1032	9	16.6	20.8
18	DOLE FOOD	371	2019	0	3216	7	133.7	11	2565	8	11.4	13.1

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	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
19	PIONEER HI-BRED INTERNATIONAL	373	2017	36	1131	17	108.4	62	1289	4	17.0	16.8
20	CHIKITA BRANDS INTERNATIONAL	420	1692	-2	4627	8	128.5	37	2892	57	9.4	12.7
21	GEO. A. HORMEL	491	1427	-1	2764	0	83.0	0	857	7	14.0	14.2
22	DEAN FOODS	609	1015	-17	2168	1	72.7	9	883	1	13.8	16.3
23	J.M. SMUCKER	661	908	40	480	7	33.4	7	263	10	16.0	16.1
24	UNIVERSAL FOODS	688	856	-9	843	4	58.0	15	682	14	14.6	19.0
25	LANCE	732	774	2	450	1	37.7	-18	300	3	15.9	15.9
26	IBP	750	745	-36	10388	2	1.4	-97	1450	-5	3.7	0.3
27	TOOTSIE ROLL INDUSTRIES	755	741	64	208	7	26.5	18	183	10	17.8	17.8
28	FLOWERS INDUSTRIES	929	530	9	838	1	24.0	-24	455	4	9.3	11.7
29	SAVANNAH FOODS & INDUSTRIES	931	529	-20	1200	-1	38.3	-21	430	3	15.1	17.4
30	INTERNATIONAL MULTIFOODS	949	512	-6	2271	4	39.0	26	921	9	12.5	11.6

10C FOOD RETAILING

GROUP COMPOSITE			32001	-1	124363	2	1554.4	945	37137	4	12.4	30.9
1	FOOD LION	99	7132	31	6439	15	205.2	19	1992	28	17.8	24.8
2	ALBERTSON'S	133	5733	5	8680	6	257.8	10	2186	11	20.7	22.1
3	WINN-DIXIE STORES	248	3075	8	10203	2	177.9	12	1847	8	20.0	20.3
4	AMERICAN STORES	319	2441	-8	20823	-6	240.2	32	7073	-3	9.0	16.0
5	SAFEWAY	421	1685	13	15119	2	79.0	-9	5181	9	NA	30.0
6	KROGER	474	1490	-20	21351	5	100.7	21	4114	0	25.3	NM
7	GIANT FOOD	483	1459	-17	3397	1	102.2	-13	1252	10	13.7	16.9
8	BRUNO'S	514	1331	-12	2658	5	63.5	-2	834	12	12.4	15.4
9	SMITH'S FOOD & DRUG CENTERS	541	1217	19	2217	9	45.1	31	1197	34	7.4	9.5
10	GREAT ATLANTIC & PACIFIC TEA	547	1194	-42	11624	4	86.2	-44	3249	-3	6.7	6.8
11	VONS	554	1157	1	5350	0	65.0	31	1803	5	9.8	14.0
12	WEIS MARKETS	558	1145	-15	1294	2	80.6	-7	734	7	12.6	12.6
13	HANNAFORD BROTHERS	602	1029	18	2008	19	43.4	3	706	12	11.2	15.0
14	QUALITY FOOD CENTERS	749	746	46	395	14	20.6	30	116	25	27.9	25.5
15	SOUTHLAND	796	692	-26	7717	-3	-38.7	NM	2741	-3	NM	NM
16	STOP & SHOP	987	476	NA	5088	4	25.7	NM	2112	0	6.8	26.6

11 FUEL

INDUSTRY COMPOSITE			255296	-11	420855	-5	15386.3	-15	389756	0	8.2	10.5
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11A COAL

GROUP COMPOSITE			1152	-23	2866	6	54.3	-57	3384	24	7.1	5.9
1	PITTSTON	881	588	-14	1946	4	-28.8	NM	1240	11	NM	-9.1
2	NERCO	904	564	-32	920	11	83.1	4	2144	33	10.7	13.7

11B OIL & GAS

GROUP COMPOSITE			229125	-11	395404	-5	14099.2	-16	365720	-1	7.9	10.4
1	EXXON	1	69086	0	104217	-2	5600.0	12	84593	-2	NA	16.7
2	MOBIL	18	23699	-9	56432	-4	1921.0	0	41354	1	10.2	11.4
3	AMOCO	21	21777	-19	25325	-10	1220.0	-36	30568	-2	7.7	8.5
4	CHEVRON	22	21367	-19	40900	-4	1293.0	-40	34607	-1	7.5	8.5
5	ATLANTIC RICHFIELD	34	16152	-23	17037	-5	709.0	-58	24014	4	10.5	10.5
6	TEXACO	41	14734	-12	38322	-8	1294.0	-11	26182	1	11.9	14.0
7	PHILLIPS PETROLEUM	123	5883	-20	13259	-5	98.0	-82	11500	-5	4.7	3.5
8	USX-MARATHON GROUP	128	5842	NA	13975	-4	-71.0	NM	11644	-2	NA	-2.4
9	OCCIDENTAL PETROLEUM	134	5701	-2	10096	-12	379.0	NM	16115	-13	NA	8.5
10	UNOCAL	155	5073	-24	9845	-10	73.0	-82	9836	1	3.9	2.9

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Transmission	4-speed automatic (std)	4-speed automatic (std)
Touring Suspension	4-wheel independent	4-wheel independent
Brakes	Anti-lock disc	Anti-lock disc
Wheels	16" aluminum alloy	15" aluminum alloy
EPA Est. MPG	18 city/28 hwy	17 city/23 hwy
M.S.R.P.*	\$21,240	\$26,150

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	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
11	BURLINGTON RESOURCES	170	4765	-4	1754	-3	197.4	-4	6290	-1	6.5	6.8
12	AMERADA HESS	232	3253	-19	6416	-9	84.3	-83	8389	6	4.9	2.7
13	SUN	257	2958	-19	11930	-9	-132.0	NM	7143	-10	NM	-4.9
14	UNOCAL EXPLORATION	263	2892	8	878	-4	146.8	-10	1955	-3	NA	19.3
15	COASTAL	330	2359	-29	9549	-1	96.3	-57	9288	9	NA	4.7
16	ASHLAND OIL	395	1849	-3	9201	-1	185.2	24	5356	7	9.8	12.7
17	PENNZOIL	396	1846	-35	2685	-2	-42.0	NM	5231	-2	NA	-3.4
18	MAPCO	405	1789	22	2783	-1	125.9	-3	1729	12	15.6	32.7
19	KERR-MCGEE	413	1742	-21	3274	-11	101.6	-10	3421	-2	NA	6.8
20	ORYX ENERGY	431	1643	-48	1601	-25	19.0	-92	4329	-19	7.4	1.0
21	MURPHY OIL	457	1534	16	1690	-15	-9.6	NM	2175	2	-1.8	-0.8
22	UNION TEXAS PETROLEUM HOLDINGS	465	1509	5	1080	-19	279.5	141	2247	7	NA	37.7
23	ENRON OIL & GAS	503	1385	-15	388	4	54.9	21	1456	3	NM	8.7
24	TRITON ENERGY	516	1318	465	219	-18	-13.5	NM	641	6	NM	-4.6
25	VALERO ENERGY	540	1219	35	1012	-13	98.7	4	1481	18	11.5	13.5
26	FINA	553	1157	-5	3336	-16	42.0	-67	2834	0	4.9	3.7
27	ANADARKO PETROLEUM	588	1073	-25	337	-13	32.4	-41	1676	2	4.8	5.2
28	TOSCO	675	878	28	1980	-8	75.4	-39	970	2	15.3	18.6
29	LOUISIANA LAND & EXPLORATION	723	785	-34	825	-6	20.9	-62	1222	3	NA	4.7
30	MAXUS ENERGY	727	783	-17	791	15	-11.2	NM	1452	-1	-1.9	NM
31	MITCHELL ENERGY & DEVELOPMENT	797	691	-13	864	16	48.8	19	2216	3	6.6	7.8
32	DIAMOND SHAMROCK	841	631	3	2576	-5	37.1	-52	1222	8	7.5	8.4
33	BP PRUDHOE BAY ROYALTY TRUST	846	626	-1	93	34	92.1	35	473	-5	NM	19.5
34	APACHE	872	597	-9	357	31	34.6	-14	1200	45	5.9	8.1
35	SANTA FE ENERGY RESOURCES	930	529	-47	380	-1	18.5	9	912	0	6.9	8.3

11C PETROLEUM SERVICES

GROUP COMPOSITE			25019	-11	22585	4	1232.8	2	20652	7	11.6	11.8
1	SCHLUMBERGER	44	14308	-7	6145	16	815.7	43	6854	11	23.1	22.9
2	HALLIBURTON	254	2969	-47	7019	1	26.6	-87	5041	13	1.6	1.2
3	DRESSER INDUSTRIES	279	2763	-22	4607	-2	135.9	-19	3191	2	8.3	7.6
4	BAKER HUGHES	287	2669	-31	2747	1	161.7	6	2895	0	10.8	10.4
5	CBI INDUSTRIES	534	1259	17	1615	3	61.1	11	1479	3	9.1	10.2
6	HELMERICH & PAYNE	932	527	-19	202	8	12.6	-65	589	2	2.6	2.5
7	NOBLE AFFILIATES	933	525	-24	250	3	19.3	-32	603	7	6.6	7.4

12 HEALTH CARE

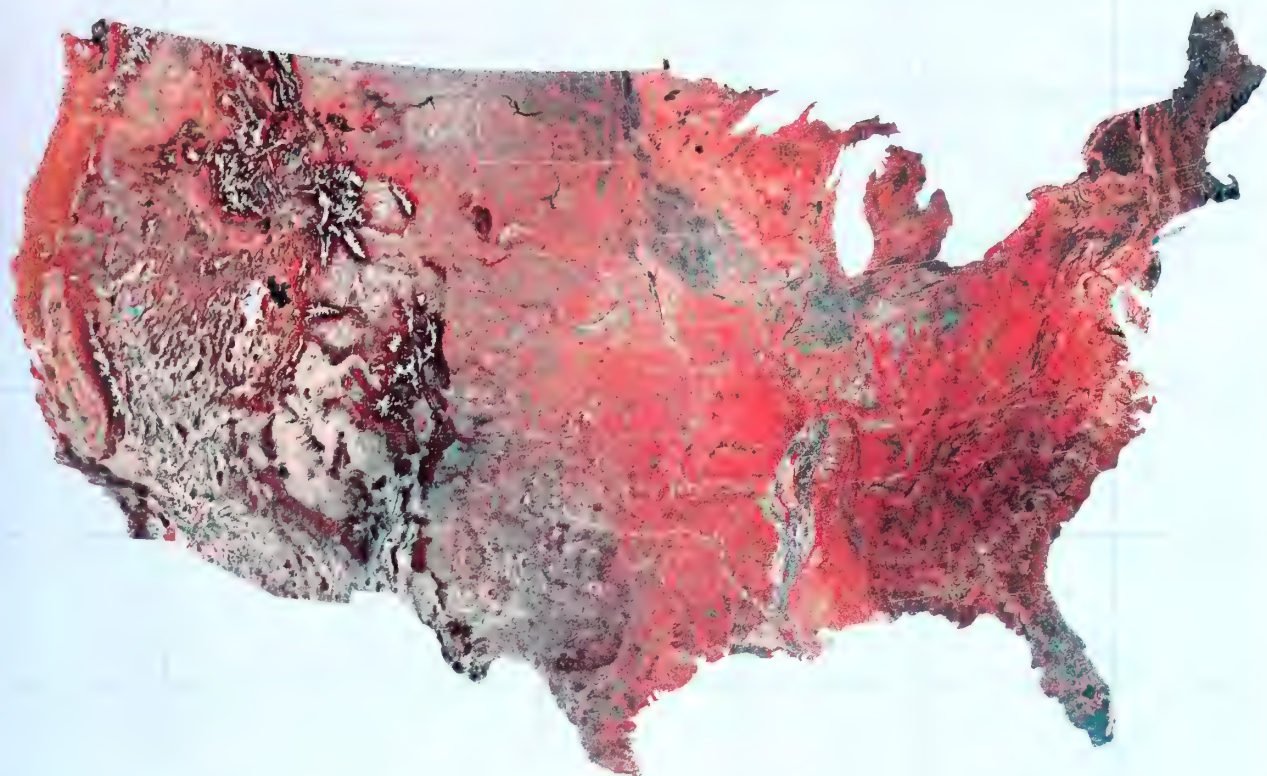
INDUSTRY COMPOSITE			401341	17	162109	13	16561.2	21	145211	11	19.2	23.2
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12A DRUG DISTRIBUTION

GROUP COMPOSITE			13617	11	30665	13	632.7	13	10554	15	11.7	14.8
1	WALGREEN	182	4446	13	6901	11	198.3	11	2199	9	17.1	18.0
2	MEDCO CONTAINMENT SERVICES	192	4105	66	1551	33	84.5	107	1105	83	10.0	14.8
3	RITE AID	399	1832	0	3670	9	118.3	15	1752	5	10.0	12.9
4	MCKESSON	528	1271	-2	9711	16	97.6	1	2714	12	10.7	14.7
5	LONGS DRUG STORES	774	721	-3	2366	1	55.4	-7	659	5	13.0	13.6
6	BERGEN BRUNSWIG	800	688	-36	4961	9	56.1	-13	1492	7	9.9	13.9
7	CARDINAL DISTRIBUTION	917	554	20	1506	39	22.5	43	633	52	9.8	10.7

12B DRUGS & RESEARCH

GROUP COMPOSITE			259442	19	65159	12	10275.0	13	72566	12	23.5	26.9
1	MERCK	5	57976	41	8603	12	2121.7	19	9499	18	37.7	45.6
2	BRISTOL-MYERS SQUIBB	9	41431	2	11159	8	2056.0	18	9416	2	34.7	35.5



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COMPANY		MARKET VALUE		SALES		PROFITS		ASSETS		RETURN		
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
3	PFIZER	16	23941	35	6950	9	722.1	-10	9635	6	15.7	14.2
4	AMERICAN HOME PRODUCTS	17	23828	33	7079	5	1375.3	12	5775	-4	NA	44.4
5	ELI LILLY	23	21105	-5	5726	10	1314.7	17	8299	16	25.7	26.5
6	SCHERING-PLOUGH	53	11452	-1	3616	9	645.6	14	4013	-2	34.3	34.9
7	SYNTEX	57	10627	24	1958	16	451.0	15	2588	26	34.5	38.5
8	MARION MERRELL DOW	66	9843	-8	2851	16	585.0	20	2762	28	34.9	41.7
9	WARNER-LAMBERT	80	8715	-16	5059	8	140.8	-71	3602	10	8.9	8.7
10	AMGEN	87	8043	59	682	128	97.9	2432	866	88	17.3	18.4
11	RHONE-POULENC RORER	89	7929	39	3824	31	326.5	NM	4143	1	20.5	36.9
12	UPJOHN	101	7009	-8	3426	13	537.4	17	4145	13	21.6	31.4
13	ALZA	240	3162	53	140	41	-62.1	NM	580	84	NM	-18.7
14	GENENTECH	243	3130	81	460	6	44.3	NM	1231	6	4.4	4.7
15	SIGMA-ALDRICH	347	2201	17	589	11	79.8	12	568	8	NA	19.2
16	IVAX	351	2148	235	159	34	8.8	NM	447	283	7.4	6.3
17	ALLERGAN	432	1640	11	839	6	-61.4	NM	834	-12	NM	-13.8
18	CARTER-WALLACE	446	1587	66	666	9	45.6	-14	572	5	11.3	11.2
19	FOREST LABORATORIES	521	1294	-2	228	41	46.5	30	362	13	15.7	15.2
20	MYLAN LABORATORIES	526	1282	47	117	12	37.1	11	214	31	19.5	19.4
21	CENTOCOR	530	1267	16	53	-18	-195.6	NM	340	24	NM	NM
22	SYNERGEN	550	1170	189	14	63	-7.1	NM	374	477	NM	-2.0
23	PERRIGO	587	1074	NA	322	NA	19.0	NA	241	NA	15.6	11.3
24	GENZYME	626	975	62	109	118	NA	NA	268	129	NA	-1.4
25	CHIRON	634	958	-7	65	38	11.8	NM	431	68	NA	4.2
26	BIOGEN	689	854	-11	61	23	7.2	-7	165	8	4.7	3.0
27	GENSIA PHARMACEUTICALS	766	730	199	5	NA	-25.1	NA	65	54	NM	-47.9
28	IMMUNEX	777	715	5	53	71	0.8	NM	254	110	NM	0.4
29	U.S. BIOSCIENCE	826	655	11	3	NM	-6.5	NM	97	141	NM	-7.1
30	GENETICS INSTITUTE	845	627	12	83	104	-10.7	NM	192	5	NM	-9.7
31	ALLIANCE PHARMACEUTICAL	873	597	271	1	0	-20.9	NM	104	101	NM	-20.7
32	MEDIMMUNE	958	505	NA	14	327	1.6	NM	65	767	5.4	4.6
33	SPI PHARMACEUTICALS	968	494	82	226	71	22.2	60	267	100	19.9	20.9
34	XOMA	984	476	7	17	-16	-34.3	NM	154	59	NA	-25.5

12C HEALTH CARE SERVICES

GROUP COMPOSITE		30793	14	27327	16	1504.5	38	24831	10	12.2	15.1	
1	HUMANA	200	3881	-23	6099	20	356.0	11	4484	8	14.8	17.6
2	U. S. HEALTHCARE	230	3309	73	1709	28	151.1	95	758	24	43.6	45.8
3	UNITED HEALTHCARE	294	2620	211	847	40	74.8	121	574	96	23.5	23.5
4	NATIONAL MEDICAL ENTERPRISES	297	2573	-29	3973	6	292.3	13	4095	5	12.4	16.4
5	NATIONAL HEALTH LABORATORIES	310	2480	79	604	20	103.9	26	411	10	31.4	31.4
6	HEALTHTRUST	466	1507	NA	2104	12	24.1	NM	2527	8	5.3	-52.2
7	T ² MEDICAL	467	1504	109	166	87	39.1	96	223	40	22.4	22.2
8	MEDICAL CARE INTERNATIONAL	508	1354	33	282	17	38.3	28	523	50	18.0	15.9
9	SURGICAL CARE AFFILIATES	523	1293	110	170	38	20.7	80	179	37	29.5	27.2
10	CRITICAL CARE AMERICA	586	1075	92	233	30	13.3	-19	239	33	NA	6.6
11	MANOR CARE	646	940	25	868	15	37.2	24	950	1	9.3	13.9
12	NOVACARE	662	905	97	230	49	26.4	57	178	63	18.4	18.9
13	HEALTHSOUTH REHABILITATION	720	789	91	225	25	22.4	73	472	57	7.8	8.3
14	CONTINENTAL MEDICAL SYSTEMS	747	751	132	491	65	22.6	64	381	50	12.2	10.8
15	AMERICAN MEDICAL HOLDINGS	799	690	151	2452	-2	3.7	NM	3128	-11	1.7	0.7
16	BEVERLY ENTERPRISES	828	654	-5	2301	9	29.2	125	1673	3	6.5	5.5
17	COMMUNITY PSYCHIATRIC CENTERS	839	633	-65	393	5	45.3	-46	572	8	8.8	9.2



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	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
18	PACIFICARE HEALTH SYSTEMS	840	633	156	1339	26	29.8	73	475	70	18.7	27.9
19	MEDITRUST	855	614	59	113	27	37.9	31	919	21	NM	10.6
20	FOUNDATION HEALTH	882	587	56	1024	7	35.6	121	263	15	NA	37.2
21	TOKOS MEDICAL	946	514	84	115	45	7.1	NM	79	30	NA	13.2
22	AMERICAN HEALTH PROPERTIES	953	509	37	80	35	33.8	20	631	16	NM	11.1
23	HEALTH CARE PROPERTY INVESTORS	962	501	26	79	10	26.5	14	459	-4	N/A	12.5
24	FHP INTERNATIONAL	985	476	-15	1430	24	33.3	3	640	34	10.6	11.7

12D MEDICAL PRODUCTS

GROUP COMPOSITE		97490	14	38958	12	4149.0	38	37261	11	18.8	21.7	
1	JOHNSON & JOHNSON	11	32019	7	12447	11	1461.0	28	10513	11	23.2	27.3
2	ABBOTT LABORATORIES	14	25410	25	6877	12	1088.7	13	6255	12	34.1	34.0
3	BAXTER INTERNATIONAL	64	9877	7	8921	10	591.0	1378	9340	10	12.2	14.4
4	U.S. SURGICAL	145	5383	100	844	64	91.2	98	742	61	17.1	27.6
5	MEDTRONIC	175	4685	33	1125	14	154.3	23	1120	15	23.6	20.8
6	BAUSCH & LOMB	258	2950	28	1520	11	85.9	-35	1392	4	11.3	9.9
7	BECTON, DICKINSON	299	2565	-7	2191	6	182.1	-1	2860	9	10.5	13.3
8	IMCERA GROUP	300	2564	27	1664	8	114.6	45	2015	-10	9.5	9.9
9	BIOMET	316	2458	54	244	35	45.2	30	242	36	22.6	22.6
10	ST. JUDE MEDICAL	367	2054	-11	210	20	84.0	30	375	35	26.2	26.2
11	STRYKER	402	1807	92	365	30	33.1	40	242	25	19.4	19.6
12	C.R. BARD	496	1412	19	876	12	57.2	42	658	7	15.6	16.4
13	SCIMED LIFE SYSTEMS	599	1036	57	168	69	30.0	15	177	96	26.4	26.3
14	MARQUETTE ELECTRONICS	699	829	NA	221	NA	12.0	NA	174	8	11.3	13.4
15	ACUSON	773	722	-40	336	19	58.5	22	336	35	21.5	21.5
16	BALLARD MEDICAL PRODUCTS	864	607	135	41	28	10.4	52	41	53	29.0	29.0
17	WESTMARK INTERNATIONAL	907	563	83	505	4	21.4	31	453	14	6.9	6.8
18	AMSCO INTERNATIONAL	919	549	26	405	21	28.4	65	326	13	14.1	14.4

13 HOUSING & REAL ESTATE

INDUSTRY COMPOSITE		23367	22	25161	-3	116.1	-91	32594	2	2.4	1.3
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13A BUILDING MATERIALS

GROUP COMPOSITE		16769	22	18919	-3	-143.7	NM	17940	4	-283.5	-2.4	
1	PPG INDUSTRIES	115	6291	14	5673	-6	201.4	-58	6056	-1	7.6	7.6
2	SHERWIN-WILLIAMS	312	2476	27	2541	12	128.2	5	1612	7	14.4	15.1
3	OWENS-CORNING FIBERGLAS	463	1515	49	2783	-9	-515.0	NM	2106	17	NM	NM
4	VULCAN MATERIALS	484	1448	6	1007	-9	52.6	-56	1073	-4	7.6	7.7
5	YORK INTERNATIONAL	668	896	NA	1653	14	13.0	219	1206	18	6.8	929.7
6	LAFARGE	693	843	15	1569	11	-50.4	NM	1836	2	NA	-5.8
7	VALSPAR	771	723	73	642	11	29.3	14	310	2	17.9	19.5
8	TECUMSEH PRODUCTS	779	711	43	1197	-9	42.5	199	1056	0	6.4	6.1
9	RPM	795	692	8	501	0	30.9	0	522	31	8.5	14.3
10	CALMAT	869	602	5	373	-12	18.9	-38	553	-6	4.9	4.9
11	HOLNAM	896	573	-17	979	-9	-95.1	NM	1611	4	NM	-17.1

13B CONSTRUCTION & REAL ESTATE

GROUP COMPOSITE		6598	21	6242	-3	259.8	-19	14654	-1	7.6	9.1	
1	NEW PLAN REALTY TRUST	652	926	39	60	9	43.2	22	458	50	NM	9.9
2	CENTEX	717	790	41	2155	-6	29.4	-47	2011	-5	7.4	5.9
3	ROUSE	737	771	-22	574	8	2.4	NM	2622	8	NM	NM
4	PHM	815	668	98	1214	5	42.6	43	3753	-10	NA	12.7

	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN		
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %	
5	ROCKEFELLER CENTER PROPERTIES		834	638	-12	123	0	38.3	3	1473	-1	NA	6.9
6	CLAYTON HOMES		858	611	35	342	16	33.2	45	486	21	10.8	15.2
7	KAUFMAN & BROAD HOME		877	593	59	1221	-11	26.5	-34	1373	-11	7.5	11.0
8	CATELLUS DEVELOPMENT		889	580	-13	145	-33	5.0	-93	1173	11	5.4	3.5
9	WEINGARTEN REALTY		936	522	7	83	8	18.0	9	441	6	NM	12.7
10	LENNAR		965	498	161	326	-7	21.1	55	862	3	NA	7.4

14 LEISURE TIME INDUSTRIES

INDUSTRY COMPOSITE		90451	22	71301	6	3918.0	-2	84582	8	9.6	12.7
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14A EATING PLACES

	GROUP COMPOSITE	22357	22	12085	5	1158.4	11	13976	8	13.3	19.7	
1	MCDONALD'S	43	14308	17	6695	1	859.6	7	10809	6	12.6	19.6
2	WENDY'S INTERNATIONAL	551	1169	27	1048	5	51.7	34	880	16	NA	10.9
3	CRACKER BARREL OLD COUNTRY STORE	564	1130	57	346	33	27.4	56	273	54	12.6	14.5
4	BRINKER INTERNATIONAL	591	1063	90	472	23	30.8	50	277	36	13.9	14.2
5	SHONEY'S	601	1034	74	992	7	38.0	29	429	7	28.5	NM
6	BOB EVANS FARMS	706	818	37	540	9	37.9	19	309	12	14.6	14.7
7	SBARRO	859	611	5	210	10	21.8	7	159	20	20.1	20.1
8	RYAN'S FAMILY STEAK HOUSES	863	608	55	299	9	23.3	-3	238	16	13.7	13.6
9	INTERNATIONAL DAIRY QUEEN	895	575	8	287	2	27.9	5	175	8	19.6	28.9
10	MORRISON	908	562	76	999	7	28.9	42	355	8	NA	15.0
11	BUFFETS	980	478	79	196	35	11.1	39	73	31	21.1	23.1

14B ENTERTAINMENT

GROUP COMPOSITE		28925	25	12069	9	1009.5	-16	18363	13	8.0	11.6	
1	WALT DISNEY	26	20229	22	6627	10	674.3	-18	10327	21	NA	16.5
2	PARAMOUNT COMMUNICATIONS	143	5490	9	4069	4	147.9	-36	6641	2	5.1	3.8
3	BLOCKBUSTER ENTERTAINMENT	346	2215	7	868	37	93.7	36	804	32	17.1	21.3
4	KING WORLD PRODUCTIONS	617	991	-18	505	10	93.6	8	591	22	36.0	33.5

14C HOTEL & MOTEL

	GROUP COMPOSITE		9190	28	13273	8	392.1	31	13934	4	8.7	12.5
1	CIRCUS CIRCUS ENTERPRISES	315	2462	34	806	16	103.3	35	788	-1	20.5	33.8
2	HILTON HOTELS	363	2078	-4	1113	-1	84.3	-25	2187	14	7.1	9.0
3	MARRIOTT	435	1630	-6	8331	9	82.0	74	6807	2	6.5	18.0
4	PROMUS	641	947	72	1031	3	30.0	29	1479	1	9.1	7.9
5	CAESARS WORLD	678	868	94	951	7	77.6	116	897	0	17.2	23.0
6	MIRAGE RESORTS	767	728	67	894	17	27.0	-3	1280	6	9.9	9.3
7	MGM GRAND	983	477	57	147	-17	-12.2	NM	496	32	NM	-2.8

14D OTHER LEISURE

	GROUP COMPOSITE		29980	18	33874	5	1358.0	-6	38308	7	8.5	10.2
1	EASTMAN KODAK	45	14084	-5	19419	3	17.0	-98	24790	4	NM	0.3
2	CARNIVAL CRUISE LINES	176	4604	65	1405	12	253.8	8	2887	8	NA	19.5
3	HASBRO	359	2097	56	2141	41	81.7	-8	1950	52	7.6	9.2
4	MATTEL	374	2001	74	1622	10	118.1	29	1061	14	24.3	26.9
5	AMERICAN GREETINGS	479	1474	27	1513	10	92.7	17	1474	13	10.3	11.1
6	POLAROID	495	1419	6	2071	5	683.7	353	1889	11	48.0	81.2
7	BRUNSWICK	515	1328	5	2088	-16	-23.7	NM	1857	-2	NM	-3.0
8	HARLEY-DAVIDSON	606	1021	98	940	9	37.0	-3	469	15	NA	16.1
9	FLEETWOOD ENTERPRISES	659	916	61	1514	4	38.6	6	934	16	7.0	8.4
10	FISHER-PRICE	910	561	NA	638	4	17.3	NM	468	17	NA	7.8
11	GIBSON GREETINGS	989	474	8	524	2	41.9	5	528	8	13.8	15.0

15 MANUFACTURING

INDUSTRY COMPOSITE		92783	18	94888	0	3316.7	-27	90288	2	7.5	9.0
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15A GENERAL MANUFACTURING

	GROUP COMPOSITE		56456	16	40204	3	2466.5	-8	34247	3	10.8	14.4
1	MINNESOTA MINING & MFG.	27	19805	-1	13340	2	1154.0	-12	11083	0	NA	18.3
2	CORNING	111	6345	16	3259	11	311.2	8	3853	10	13.0	15.3



RANK	COMPANY	MARKET VALUE		SALES		PROFITS		ASSETS		RETURN		
		1991 RANK	\$ MIL.	CHANGE FROM 1991	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990	12 MONTHS 1990 \$ MIL.	CHANGE FROM 1990	12 MONTHS 1990 \$ MIL.	CHANGE FROM 1990	ON INVESTED CAPITAL	ON COMMON EQUITY
3	RUBBERMAID	154	5083	39	1667	9	162.7	13	1245	12	18.4	18.4
4	ILLINOIS TOOL WORKS	215	3489	15	2640	4	180.6	-1	2257	5	13.7	14.9
5	DURACELL INTERNATIONAL	241	3153	NA	1589	10	113.6	474	2282	1	12.5	11.6
6	NEWELL	270	2821	59	1119	4	112.2	11	1076	23	15.2	19.2
7	HILLENBRAND INDUSTRIES	277	2788	73	1199	8	89.2	18	1532	21	16.4	18.2
8	AVERY DENNISON	429	1664	9	2545	-2	63.0	968	1740	-8	7.4	7.6
9	INTERNATIONAL GAME TECHNOLOGY	444	1597	303	250	16	35.2	65	366	69	16.6	26.4
10	PARKER HANNIFIN	445	1592	22	2354	-7	45.8	-57	1866	-6	5.5	4.8
11	JOSTENS	492	1425	-3	872	6	65.1	5	525	3	19.4	21.2
12	HARSCO	660	908	36	1943	10	76.5	6	1060	7	14.8	16.0
13	CRANE	702	826	-7	1303	-9	45.0	-28	664	-7	12.5	13.6
14	KEYSTONE INTERNATIONAL	708	814	-27	521	17	22.8	-48	427	4	9.2	9.4
15	FEDERAL SIGNAL	787	707	27	467	6	31.0	11	341	15	19.3	18.8
16	WATTS INDUSTRIES	816	668	18	384	19	34.2	17	452	49	9.6	13.4
17	TRINOVA	818	667	-10	1681	-14	-184.1	NM	1070	-19	NM	-49.1
18	FIRST BRANDS	892	577	1	997	-5	38.6	-8	805	0	10.4	15.0
19	MARK IV INDUSTRIES	916	554	245	1123	29	28.5	14	1041	8	9.0	8.8
20	SEALED AIR	975	487	77	435	5	16.2	42	275	22	21.6	NM
21	LANCASTER COLONY	976	486	103	516	2	25.1	56	289	-3	15.8	17.3

15B MACHINE & HAND TOOLS

	GROUP COMPOSITE		5907	43	8318	-3	234.7	-20	8731	-3	7.7	9.3
1	STANLEY WORKS	358	2104	43	1962	-1	95.1	-11	1548	4	10.8	13.5
2	SNAP-ON TOOLS	433	1636	27	882	-5	73.2	-27	915	1	11.1	11.2
3	BLACK & DECKER	459	1531	68	4637	-4	53.0	4	5533	-6	6.0	6.2
4	DANAHER	837	636	1	837	-1	13.3	-63	735	-1	4.2	4.2

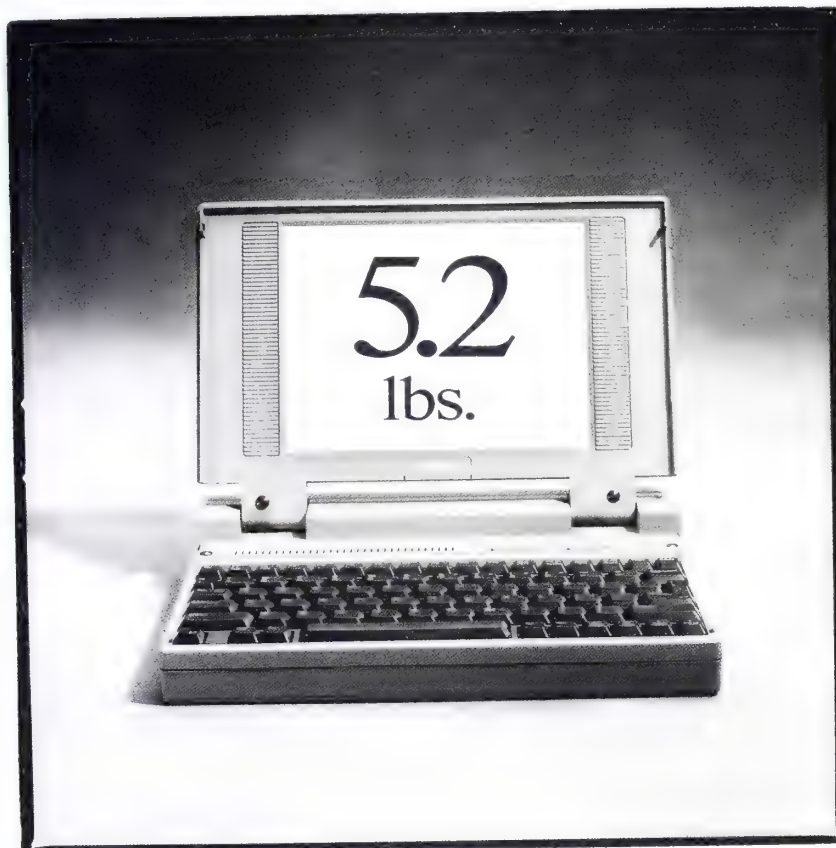
15C SPECIAL MACHINERY

	GROUP COMPOSITE		25158	12	39687	-4	481.7	-67	41267	1	5.3	3.3
1	CATERPILLAR	158	4995	-10	10182	-11	-404.0	NM	12042	1	NM	-10.0
2	DEERE	198	3916	1	7070	-8	3.0	-99	11623	6	NM	0.1
3	INGERSOLL-RAND	239	3183	19	3586	-4	150.6	-19	2980	0	9.7	9.6
4	DOVER	332	2352	-7	2196	-1	128.2	-18	1357	-8	17.1	15.5
5	TYCO LABORATORIES	419	1706	-29	3077	20	98.3	-14	2467	0	8.9	9.9
6	FMC	427	1667	30	3899	5	173.1	11	2816	-5	18.5	69.4
7	GENERAL SIGNAL	585	1076	29	1616	-5	64.0	NM	1180	-9	11.5	13.4
8	NORDSON	657	918	97	392	10	34.7	19	308	15	22.2	21.4
9	STEWART & STEVENSON SERVICES	696	832	44	669	0	32.1	3	406	12	14.7	15.7
10	APPLIED MATERIALS	734	773	45	661	15	28.4	4	674	18	8.3	8.4
11	TIMKEN	739	766	-5	1647	-3	-35.7	NM	1759	-3	NM	-3.5
12	BRIGGS & STRATTON	758	738	68	971	-3	43.9	5	659	2	14.1	15.2
13	BWIP HOLDING	849	619	NA	430	14	31.2	18	332	6	19.0	23.9
14	HARNISCHFEGGER INDUSTRIES	879	589	-6	1554	-10	61.5	-11	1493	-6	10.4	10.3
15	GOULDS PUMPS	914	559	9	567	2	31.3	2	396	-7	13.3	14.3
16	PENTAIR	996	469	48	1169	-1	41.1	25	776	-1	9.7	15.1

15D TEXTILES

	GROUP COMPOSITE		5261	66	6679	2	133.8	34	6044	7	5.6	4.5
1	SHAW INDUSTRIES	472	1495	123	1619	-2	36.0	-40	817	3	9.3	10.0
2	UNIFI	576	1100	134	756	12	36.1	-13	509	NM	9.9	10.0
3	WEST POINT-PEPPERELL	622	978	3	1192	-3	-10.5	NM	2329	-9	-15.3	-0.9
4	SPRINGS INDUSTRIES	808	681	40	1890	1	27.1	NM	1251	4	5.2	4.8
5	DELTA WOODSIDE INDUSTRIES	945	514	143	664	25	34.8	229	463	14	12.6	11.6
6	ALBANY INTERNATIONAL	969	493	30	557	0	10.3	35	675	-4	4.2	4.2

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16 METALS & MINING

INDUSTRY COMPOSITE		39480	13	47912	-9	-728.4	NM	55427	1	1.8	-3.4
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16A ALUMINUM

GROUP COMPOSITE		11835	-2	21387	-5	355.4	-66	25573	2	5.0	3.3
1 ALUMINUM CO. OF AMERICA	122	5913	3	9884	-8	62.7	-79	11260	-2	4.0	1.2
2 REYNOLDS METALS	224	3353	-10	5730	-5	154.1	-48	6685	2	5.6	5.2
3 AMAX	403	1804	-21	3772	0	30.2	-87	5542	13	3.6	1.3
4 KAISER ALUMINUM	740	766	NA	2001	-5	108.4	-49	2085	NA	14.7	20.4

16B STEEL

GROUP COMPOSITE		8138	19	17543	-13	-1733.5	NM	17014	-4	NM	-29.5
1 NUCOR	383	1959	14	1465	-1	64.7	-14	1132	7	7.8	9.4
2 USX-U.S. STEEL GROUP	498	1403	NA	4864	-20	-507.0	NM	5607	0	NA	-30.5
3 WORTHINGTON INDUSTRIES	509	1354	44	891	-4	46.3	-18	591	0	11.5	12.5
4 BETHLEHEM STEEL	573	1113	-1	4318	-12	-767.0	NM	4128	-6	NM	-78.7
5 ALLEGHENY LUDLUM	575	1101	27	1005	-7	41.1	-40	764	-4	10.8	11.4
6 INLAND STEEL INDUSTRIES	811	677	-12	3404	-12	-275.1	NM	2698	-8	NM	-24.3
7 ARMCO	928	531	2	1595	-8	-336.5	NM	2093	-13	NA	-46.3

16C OTHER METALS

GROUP COMPOSITE		19507	21	8983	-8	649.7	-45	12840	8	8.1	9.1
1 NEWMONT GOLD	183	4431	9	573	-11	125.9	-11	817	16	17.8	17.8
2 FREEPORT-MCMORAN COPPER & GOLD	194	4052	82	468	8	102.0	13	1158	72	17.0	59.1
3 NEWMONT MINING	264	2881	8	623	-9	94.3	-44	818	-14	32.4	62.1
4 PHELPS DODGE	276	2798	18	2434	-8	272.9	-40	3051	8	13.1	14.7
5 HOMESTAKE MINING	454	1542	-10	411	-20	-99.9	NM	927	-14	NM	-14.9
6 ASARCO	581	1083	-12	1910	-14	46.0	-69	2937	6	4.0	3.1
7 CYPRUS MINERALS	687	859	-3	1679	-10	42.7	-62	1966	2	3.8	2.5
8 AMAX GOLD	780	711	-18	128	-14	21.2	-25	198	26	15.2	15.4
9 BATTLE MOUNTAIN GOLD	843	628	5	170	19	-1.2	NM	523	16	NM	0.4
10 PRECISION CASTPARTS	937	522	-23	588	13	45.9	41	445	9	14.3	15.0

17 NONBANK FINANCIAL

INDUSTRY COMPOSITE		224124	11	295172	6	19276.6	30	1627793	11	13.4	13.1
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17A FINANCIAL SERVICES

GROUP COMPOSITE		113071	20	129080	8	8908.6	40	891456	11	14.0	15.3
1 FEDERAL NATIONAL MORTGAGE ASSN.	32	17062	56	13586	7	1455.4	24	147072	10	9.2	27.6
2 AMERICAN EXPRESS	60	10152	-18	25763	6	789.0	133	153456	9	43.1	10.8
3 BERKSHIRE HATHAWAY	62	9970	10	3028	33	481.3	27	12771	38	7.1	6.6
4 LOEWS	95	7237	-7	13620	11	904.3	12	39206	13	13.4	16.6
5 FEDERAL HOME LOAN MORTGAGE ASSN.	97	7202	57	4219	6	555.0	34	46860	15	14.2	22.6
6 MERRILL LYNCH	127	5855	90	12363	11	696.1	263	86259	27	NA	18.0
7 STUDENT LOAN MARKETING ASSN.	129	5796	19	3257	-10	345.1	15	45320	10	6.9	35.7
8 MARSH & MCLENNAN	147	5370	-8	2779	2	305.5	0	2382	-1	23.6	28.5
9 PRIMERICA	184	4372	26	6608	7	478.8	28	22000	12	13.6	15.3
10 MORGAN STANLEY GROUP	188	4174	48	6785	16	475.1	76	70742	18	65.5	21.7
11 H&R BLOCK	210	3556	34	1328	21	150.7	28	695	21	26.4	26.4
12 SALOMON	231	3305	4	9175	3	507.0	67	96737	-12	21.9	13.8
13 TRANSAMERICA	233	3252	17	6815	2	99.4	-63	33682	6	5.0	3.1



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		TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
14	BEAR STEARNS	379	1965	43	2527	6	232.5	126	54670	56	44.3	23.1
15	FRANKLIN RESOURCES	390	1900	40	334	15	104.0	15	627	24	28.3	26.9
16	BENEFICIAL	434	1631	32	1810	3	148.8	14	9972	8	8.7	12.9
17	FIRST FINANCIAL MANAGEMENT	451	1563	75	1507	18	89.0	22	5497	0	16.1	9.0
18	POLICY MANAGEMENT SYSTEMS	468	1503	58	415	20	47.6	28	565	16	NA	9.9
19	DREYFUS	477	1480	7	282	8	67.9	9	838	2	9.8	9.4
20	EQUIFAX	502	1386	-11	1094	1	54.1	-15	709	-6	12.7	13.7
21	CHARLES SCHWAB	518	1314	179	795	27	49.5	195	5000	19	19.3	27.2
22	A. G. EDWARDS	567	1123	62	851	32	91.8	68	1426	24	20.0	19.8
23	MERCURY FINANCE	597	1041	105	116	22	32.8	41	527	23	17.3	33.6
24	COUNTRYWIDE CREDIT INDUSTRIES	630	965	285	279	41	45.0	137	1970	63	10.9	10.5
25	FUND AMERICAN	636	958	-28	241	-11	184.0	179	2828	-75	13.1	7.1
26	CRAWFORD	644	942	36	538	20	37.4	17	293	8	22.3	22.6
27	PAINWEBBER GROUP	650	932	81	3166	6	150.7	NM	20399	9	NA	19.8
28	UNITED INVESTORS MANAGEMENT	674	879	26	311	20	66.8	12	1240	27	13.4	15.5
29	ALEXANDER & ALEXANDER SERVICES	686	859	-19	1369	2	-10.4	NM	2765	-2	NM	-2.6
30	HEALTHCARE COMPARE	719	790	134	71	68	12.8	131	70	34	23.8	23.8
31	ALLEGHANY	730	777	30	1417	16	21.7	-67	4539	7	4.0	3.1
32	T. ROWE PRICE ASSOCIATES	857	613	66	205	21	30.4	45	180	11	22.7	24.1
33	LEUCADIA NATIONAL	885	582	78	835	24	26.1	-63	4404	81	5.4	8.7
34	BROAD	906	563	85	814	2	46.8	18	11836	14	6.6	11.2
35	GREEN TREE ACCEPTANCE	940	518	144	215	22	56.7	55	876	19	17.8	20.8
36	WESCO FINANCIAL	964	498	25	133	7	30.2	11	871	17	8.1	8.2
37	ADVANTA	967	494	270	203	51	25.2	67	1717	18	11.5	23.1
38	UNITED ASSET MANAGEMENT	973	491	49	227	33	24.6	35	455	18	NA	13.9

17B INSURANCE

GROUP COMPOSITE		102771	1	154149	4	9445.9	21	612715	9	10.7	11.6	
1	AMERICAN INTERNATIONAL GROUP	29	18308	-8	15834	6	1553.0	8	69248	19	NA	14.1
2	GENERAL RE	86	8155	-3	3207	9	656.7	7	12405	12	16.5	18.3
3	CHUBB	137	5673	0	4579	7	552.0	6	13775	12	12.0	15.6
4	CNA FINANCIAL	159	4913	-5	11131	12	612.5	67	35673	15	NM	12.9
5	AETNA LIFE & CASUALTY	165	4802	-4	19196	-3	505.2	-18	91988	3	NM	6.8
6	AMERICAN GENERAL	177	4598	7	4395	-1	480.0	-15	36105	7	10.8	11.1
7	CIGNA	195	4016	14	18750	3	453.0	42	66700	5	7.0	8.1
8	GEICO	234	3241	21	2147	11	196.4	-6	4086	14	15.3	17.9
9	TORCHMARK	249	3008	5	1932	8	246.5	8	6160	11	16.0	23.1
10	ST. PAUL	256	2966	5	4369	8	405.1	4	12982	6	14.2	17.6
11	SAFECO	260	2941	19	3172	0	259.6	-7	11907	13	10.3	11.7
12	AON	282	2707	12	2893	10	242.0	1	11061	7	13.1	15.4
13	CAPITAL HOLDING	289	2654	32	2671	4	250.2	51	18900	13	14.2	15.2
14	UNUM	318	2450	26	2421	12	205.0	11	10668	12	32.4	14.9
15	AFLAC	328	2360	30	3283	23	148.7	27	10145	26	14.7	16.1
16	LINCOLN NATIONAL	336	2334	7	9169	8	208.4	9	34000	23	9.0	8.2
17	TRAVELERS	360	2083	-10	11377	1	307.4	NM	52709	-7	5.5	6.6
18	MBIA	380	1963	37	269	20	144.7	14	2278	13	12.6	13.6
19	CINCINNATI FINANCIAL	388	1909	17	1138	11	147.7	18	3436	33	11.5	11.0
20	JEFFERSON-PILOT	398	1838	31	1173	1	175.7	11	4925	11	11.2	11.2
21	UNITRIN	407	1768	-15	1255	3	137.2	4	4272	2	7.3	7.3
22	KEMPER	442	1599	4	3130	7	204.6	1622	14020	3	13.6	11.5
23	CONTINENTAL CORP.	480	1467	-4	5466	-6	125.6	-21	14108	2	5.6	2.5
24	AMBAC	544	1208	NA	187	14	113.7	8	1432	16	13.2	15.2

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25	MGIC INVESTMENT	571	1116	NA	294	14	75.0	24	894	26	15.3	15.9
26	AMERICAN NATIONAL INSURANCE	592	1058	0	1197	9	126.0	16	NA	NA	NA	NA
27	PROVIDENT LIFE & ACCIDENT	611	1012	-1	2846	3	117.2	-35	14800	9	NA	8.4
28	20th CENTURY INDUSTRIES	618	989	8	880	14	123.4	52	1370	11	26.2	22.0
29	PROGRESSIVE	619	984	-30	1493	9	32.9	-65	2959	11	NM	7.0
30	CONSECO	631	962	297	1392	85	121.0	190	11600	40	21.4	60.3
31	HARTFORD STEAM BOILER INSPECTION	633	959	-18	630	12	73.9	-6	889	7	16.7	18.5
32	OHIO CASUALTY	638	956	29	1687	5	96.7	27	3531	9	11.2	12.9
33	OLD REPUBLIC INTERNATIONAL	669	894	52	1344	8	120.1	16	3712	12	10.8	15.0
34	TRANSATLANTIC HOLDINGS	700	829	7	623	7	70.5	14	2204	11	14.8	14.8
35	HANOVER INSURANCE	729	779	31	1809	6	49.1	5	3488	11	NA	5.8
36	USF&G	738	769	-5	4172	-5	-144.0	NM	14456	4	NM	-22.7
37	ARGONAUT GROUP	778	715	5	517	-15	84.4	-6	1946	-1	15.2	15.2
38	USLIFE	802	686	27	1383	12	74.9	9	5153	14	8.4	7.7
39	W. R. BERKLEY	878	591	8	541	1	46.6	29	1526	8	10.7	11.5
40	HOME BENEFICIAL	944	515	40	197	-17	47.4	-29	1205	4	10.5	10.5

17C SAVINGS & LOAN

GROUP COMPOSITE			8282	13	11943	-3	922.1	53	123622	-1	8.2	13.0
1	GOLDEN WEST FINANCIAL	311	2476	29	2241	5	238.6	32	24298	8	7.1	16.5
2	GREAT WESTERN FINANCIAL	331	2352	8	3953	-6	298.1	135	39600	1	7.4	14.2
3	H.F. AHMANSON	370	2020	2	4592	-4	245.8	29	47276	-8	9.6	9.3
4	WASHINGTON FEDERAL SAVINGS & LOAN	694	839	23	283	0	73.8	17	2935	11	11.2	19.3
5	STANDARD FEDERAL BANK	876	595	102	874	-4	65.8	64	9514	2	9.2	12.5

18 OFFICE EQUIPMENT & COMPUTERS

INDUSTRY COMPOSITE		197305	10	191843	2	2496.1	-78	221366	6	3.2	2.6
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18A BUSINESS MACHINES & SERVICES

	GROUP COMPOSITE		15204	25	11161	8	743.5	10	11200	9	14.8	15.4
1	PITNEY BOWES	152	5160	27	3333	4	287.9	39	6381	5	15.7	16.0
2	DELUXE	222	3366	6	1474	4	182.9	6	1098	19	21.7	24.5
3	CUC INTERNATIONAL	490	1435	123	521	22	27.7	95	276	20	32.0	110.8
4	JOHN H. HARLAND	690	850	-1	379	2	49.8	-13	352	1	NA	15.6
5	INTELLIGENT ELECTRONICS	703	822	35	2173	42	38.6	15	707	60	14.1	14.1
6	DIEBOLD	736	771	47	506	6	35.7	32	536	3	9.1	9.3
7	HON INDUSTRIES	835	638	12	608	-8	32.9	-24	281	1	19.1	22.8
8	VERIFONE	890	579	81	188	21	18.7	54	189	25	12.0	12.2
9	WALLACE COMPUTER SERVICES	891	578	2	482	6	36.1	-8	444	16	10.1	10.9
10	STANDARD REGISTER	954	509	27	694	-3	32.7	50	464	2	9.5	9.9
11	HERMAN MILLER	966	495	-8	803	-11	0.4	-99	474	-11	0.2	0.1

18B COMPUTERS & PERIPHERALS

GROUP COMPOSITE		115056	-7	156252	-1	-556.6	NM	184493	4	-1.0	-1.1	
1	INTERNATIONAL BUSINESS MACHINES	8	49322	-34	64792	-6	-564.0	NM	92473	6	-14.3	-1.5
2	HEWLETT-PACKARD	28	18690	55	14949	10	856.0	11	12276	10	11.8	11.3
3	APPLE COMPUTER	90	7583	2	6496	13	325.4	-35	3745	19	16.9	16.9
4	DIGITAL EQUIPMENT	94	7287	-27	14238	9	-864.5	NM	11944	3	NM	-11.6
5	XEROX	100	7091	32	17830	-1	454.0	-25	31658	0	9.4	8.6
6	SUN MICROSYSTEMS	252	2987	-10	3455	25	199.3	32	2341	7	13.1	15.0
7	STORAGE TECHNOLOGY	283	2706	163	1585	3	93.1	-1	1700	17	13.6	12.8
8	COMPAQ COMPUTER	306	2511	-59	3271	-9	130.9	-71	2750	9	8.2	7.0

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	COMPANY	MARKET VALUE		SALES		PROFITS		ASSETS		RETURN		
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
9	TANDY	337	2321	-12	4515	-2	176.2	-32	3291	-6	9.6	9.4
10	AMDAHL	386	1929	10	1702	-21	4.4	-98	2336	0	NA	0.3
11	UNISYS	461	1516	50	8696	-14	-1393.3	NM	8432	-18	NM	NM
12	TANDEM COMPUTERS	506	1365	-15	1933	3	-66.5	NM	1962	4	NM	-5.7
13	SILICON GRAPHICS	552	1159	38	638	32	36.8	-8	698	77	NA	9.3
14	CONNER PERIPHERALS	556	1155	-25	1599	20	92.5	-29	1335	52	10.0	13.4
15	STRATUS COMPUTER	565	1130	62	449	11	49.7	34	385	20	17.6	15.8
16	WANG LABORATORIES	582	1083	99	1940	-18	-373.4	NM	1312	-25	NM	NM
17	CRAY RESEARCH	594	1046	-6	862	7	113.0	0	1079	14	14.8	14.9
18	SEAGATE TECHNOLOGY	607	1020	4	2669	0	-11.1	NM	1742	-6	NM	-1.5
19	DELL COMPUTER	684	861	29	889	63	50.9	87	470	111	18.8	19.9
20	QUANTUM	798	691	0	1074	50	49.6	-26	496	19	19.5	17.7
21	AST RESEARCH	847	621	-20	827	41	70.2	34	515	41	20.5	21.6
22	CONTROL DATA	951	510	-6	1525	-10	-8.6	NM	1214	-15	-19.9	-2.1
23	SYMBOL TECHNOLOGIES	992	472	27	319	38	22.8	201	338	14	8.9	8.7

18C COMPUTER SOFTWARE & SERVICES

GROUP COMPOSITE			67044	56	24429	19	2309.3	18	25674	22	14.9	18.4
1	MICROSOFT	24	21039	79	2276	54	581.4	63	2128	56	33.0	32.8
2	NOVELL	83	8279	127	710	35	184.2	68	797	48	27.1	27.5
3	AUTOMATIC DATA PROCESSING	118	6043	32	1811	4	238.9	9	1659	10	20.3	20.7
4	ELECTRONIC DATA SYSTEMS	NR	5919	35	7029	17	563.0	13	5703	25	20.1	21.6
5	ORACLE SYSTEMS	285	2697	127	1085	6	33.6	-8	759	-11	8.4	9.0
6	COMPUTER ASSOCIATES INTERNATIONAL	286	2680	53	1438	10	173.0	7	2308	45	14.1	14.6
7	CISCO SYSTEMS	343	2250	194	244	110	58.8	120	187	89	39.6	39.6
8	BORLAND INTERNATIONAL	410	1757	117	437	23	-75.1	NM	386	5	NM	-31.3
9	CABLETRON SYSTEMS	443	1599	53	263	68	52.4	69	208	86	28.5	28.5
10	BMC SOFTWARE	448	1576	56	176	50	43.2	87	207	62	33.6	32.7
11	LOTUS DEVELOPMENT	501	1388	23	829	20	43.1	85	726	10	NA	11.7
12	COMPUTER SCIENCES	549	1182	16	1945	16	65.5	-4	1342	41	8.4	11.3
13	ADOBE SYSTEMS	572	1115	-1	230	36	51.6	29	221	52	30.6	28.2
14	LEGENT	632	960	12	208	15	36.2	4	298	52	15.9	16.3
15	CADENCE DESIGN SYSTEMS	654	923	-9	392	1	-21.7	NM	350	2	NM	-11.8
16	SYMANTEC	666	897	71	184	67	16.9	178	93	65	NA	34.4
17	INTERGRAPH	672	882	-26	1195	14	71.1	14	997	10	9.7	9.9
18	MENTOR GRAPHICS	726	783	13	400	-8	-61.6	NM	446	-12	NM	-23.0
19	EXABYTE	769	727	60	234	37	32.2	17	150	49	32.2	32.3
20	AUTODESK	793	694	-48	285	20	57.8	2	328	28	NA	21.9
21	COMDISCO	827	654	-38	2200	10	81.0	-1	5148	6	6.7	12.3
22	STRUCTURAL DYNAMICS RESEARCH	909	562	19	146	23	17.9	35	134	26	21.6	21.6
23	ARTISOFT	939	519	NA	54	71	9.3	59	67	NA	NA	14.9
24	SYSTEM SOFTWARE ASSOCIATES	971	491	85	171	26	20.7	3	136	19	NA	30.6
25	FISERV	974	488	62	281	54	18.3	33	740	31	9.3	11.4
26	WELLFLEET COMMUNICATIONS	986	476	NA	58	NA	6.4	NA	76	NA	10.1	10.0
27	PAYCHEX	1000	465	60	148	15	11.1	25	79	20	17.8	18.1

19 PAPER & FOREST PRODUCTS

INDUSTRY COMPOSITE			56459	25	76649	-4	1465.6	-58	97825	3	4.8	4.0
19A FOREST PRODUCTS												
GROUP COMPOSITE			17472	47	27883	-6	-157.7	NM	36605	-2	NM	-1.7
1	WEYERHAEUSER	105	6649	34	8702	-4	-100.9	NM	16928	4	NM	-2.6
2	GEORGIA-PACIFIC	138	5661	48	11524	-9	-79.0	NM	10622	-12	-5.0	-2.7

	COMPANY	MARKET VALUE		SALES		PROFITS		ASSETS		RETURN		
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	ON INVESTED CAPITAL	ON COMMON EQUITY
3	LOUISIANA-PACIFIC	334	2337	104	1702	-5	55.9	-39	2107	0	4.5	4.6
4	WILLAMETTE INDUSTRIES	382	1962	52	2005	5	45.8	-65	2219	13	4.9	4.6
5	BOISE CASCADE	681	863	-16	3950	-6	-79.5	NM	4729	-1	NM	-8.1
19B PAPER												
	GROUP COMPOSITE		38986	18	48767	-4	1623.3	-32	61220	6	6.0	6.3
1	INTERNATIONAL PAPER	75	9021	33	12688	-2	399.0	-30	14941	9	6.7	7.1
2	KIMBERLY-CLARK	85	8244	18	6777	6	508.3	18	5650	7	17.5	20.2
3	UNION CAMP	214	3530	24	2967	4	124.8	-46	4612	14	6.4	6.5
4	SCOTT PAPER	238	3189	-3	4977	-7	-69.9	NM	6493	-6	NM	-3.5
5	CHAMPION INTERNATIONAL	317	2451	-1	4786	-6	40.3	-82	8588	5	2.1	0.3
6	WESTVACO	340	2295	22	2268	-5	147.9	-7	3459	5	7.2	8.6
7	MEAD	356	2115	21	4579	-4	75.6	-29	3986	3	5.0	4.9
8	CONSOLIDATED PAPERS	415	1727	-3	872	-8	91.4	-36	1411	18	8.3	9.5
9	JAMES RIVER CORP. OF VIRGINIA	423	1681	-23	4562	-16	78.3	0	5627	-2	4.0	2.4
10	POTLATCH	520	1303	36	1237	-1	55.8	-43	1892	11	5.1	6.1
11	P. H. GLATFELTER	537	1247	6	568	-9	76.0	-14	630	5	17.2	17.2
12	BOWATER	651	931	9	1289	-7	45.6	-48	2780	21	4.2	4.3
13	WAUSAU PAPER MILLS	752	742	143	357	4	34.7	71	237	8	23.5	24.7
14	CHESAPEAKE	948	512	49	841	0	15.4	-8	916	5	5.1	4.8

20 PUBLISHING & BROADCASTING

INDUSTRY COMPOSITE	99447	18	61861	1	1777.7	-32	101024	-1	6.6	3.3
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20A BROADCASTING

	GROUP COMPOSITE		37517	14	19425	3	-30.4	NM	41250	-1	2.0	-1.1
1	CAPITAL CITIES/ABC	92	7320	-10	5382	0	374.7	-22	7129	13	9.3	10.4
2	AMERICAN TV & COMMUNICATIONS	113	6314	36	1220	10	160.9	34	2047	-2	15.7	25.0
3	TELE-COMMUNICATIONS	120	5929	6	3792	8	-218.0	NM	12391	1	NM	-47.1
4	TURNER BROADCASTING SYSTEM	181	4481	112	1480	6	42.9	NM	2255	8	7.1	NM
5	VIACOM	193	4073	57	1712	7	-46.6	NM	4197	5	NM	-6.4
6	CBS	344	2247	-7	3035	-7	-98.7	NM	2816	-44	NM	-31.3
7	COMCAST	368	2043	21	709	11	-161.2	NM	2687	9	NA	NM
8	BHC COMMUNICATIONS	449	1573	2	263	-6	108.1	-78	2012	7	6.6	6.8
9	MULTIMEDIA	623	977	15	524	9	48.4	-1	557	4	25.2	NM
10	CENTURY COMMUNICATIONS	748	749	21	294	15	-80.6	NM	1333	9	NM	NM
11	CHRIS-CRAFT INDUSTRIES	810	678	-13	284	-5	58.3	-80	2017	2	6.0	5.6
12	CABLEVISION SYSTEMS	817	668	13	603	7	-227.2	NM	1502	-10	NM	NM
13	TCA CABLE TV	999	466	28	127	12	8.5	79	306	-4	8.3	12.0

20B PUBLISHING

	GROUP COMPOSITE		61930	20	42436	0	1808.1	-8	59773	0	10.3	4.7
1	DUN & BRADSTREET	65	9859	20	4643	-4	508.5	0	4777	0	25.3	24.6
2	TIME WARNER	70	9492	52	12021	4	-99.0	NM	24889	-2	NA	-8.2
3	GANNETT	104	6738	5	3382	-2	301.6	-20	3684	-4	12.0	20.3
4	READER'S DIGEST ASSOCIATION	140	5650	40	2465	12	220.8	16	1913	12	24.8	30.0
5	TIMES MIRROR	180	4530	19	3624	0	82.0	-55	4052	-3	4.3	4.3
6	DOW JONES	235	3223	22	1725	0	72.2	-32	2471	-5	4.8	5.0
7	KNIGHT-RIDDER	247	3076	23	2237	-3	132.1	-11	2358	7	9.9	11.8
8	MCGRAW-HILL	267	2838	-1	1943	0	148.0	-14	2525	0	12.3	NA
9	TRIBUNE	272	2815	1	2035	-14	142.0	NM	2795	-1	NA	25.8
10	WASHINGTON POST	274	2803	-2	1380	-4	118.7	-32	1512	4	12.5	12.7
11	NEW YORK TIMES	342	2263	29	1703	-4	47.0	-28	2128	-1	4.9	NA
12	E. W. SCRIPPS	394	1854	24	1300	0	64.6	35	1700	12	9.1	9.8
13	ENQUIRER/STAR GROUP	683	861	NA	276	29	4.0	507	777	-3	2.1	-1.6
14	COMMERCE CLEARING HOUSE	705	819	-12	704	-2	31.0	-24	626	2	13.2	13.7
15	TOPPS	743	757	-2	286	-1	55.5	9	129	9	115.7	124.9
16	AFFILIATED PUBLICATIONS	759	738	5	393	-27	-66.9	NM	493	-3	NM	-32.4
17	A. H. BELO	821	665	16	432	-2	12.4	-58	746	8	NA	5.4
18	LEE ENTERPRISES	831	644	-3	339	14	29.6	-33	468	1	11.1	15.7
19	MCCLEACHY NEWSPAPERS	875	595	5	427	1	23.7	-10	477	2	6.9	7.3
20	CENTRAL NEWSPAPERS	893	576	12	420	-3	25.9	-8	389	7	8.9	9.1



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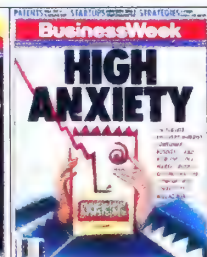
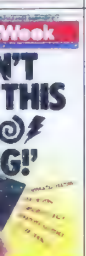
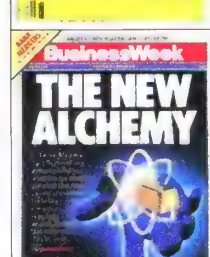


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	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
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21	MARVEL ENTERTAINMENT GROUP	899	570	NA	115	42	16.5	204	100	NA	27.6	38.4
22	MEDIA GENERAL	905	564	3	586	-5	-62.1	NM	762	-2	NM	-30.8

21 SERVICE INDUSTRIES

INDUSTRY COMPOSITE	69015	10	56813	11	2511.7	-11	48992	13	10.2	13.0
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21A CONSTRUCTION & ENGINEERING

GROUP COMPOSITE		8361	1	17810	4	370.8	72	9304	2	12.0	11.9	
1	FLUOR	220	3404	-17	6580	-10	152.1	11	2421	-2	14.5	14.9
2	EG&G	493	1423	25	2689	9	81.2	10	698	3	22.4	20.9
3	MCDERMOTT INTERNATIONAL	579	1089	-6	3544	20	37.6	NM	3239	-3	8.1	5.3
4	FOSTER WHEELER	614	1009	-12	1992	20	43.3	13	1635	13	NA	8.4
5	JACOBS ENGINEERING GROUP	746	752	80	1026	10	21.4	35	277	3	18.8	18.8
6	MORRISON KNUDSEN	804	683	1	1980	16	35.1	-4	1034	8	8.0	9.5

21B INDUSTRIAL DISTRIBUTION

	GROUP COMPOSITE		11705	31	10105	9	505.3	0	5240	11	13.3	14.1
1	GENUINE PARTS	205	3737	21	3435	3	207.7	1	1452	7	18.4	19.0
2	W.W. GRAINGER	273	2804	32	2077	7	127.7	1	1217	5	14.8	14.8
3	PREMIER INDUSTRIAL	416	1723	-4	632	-1	73.1	-5	375	12	22.3	22.7
4	OFFICE DEPOT	476	1482	120	1301	44	14.4	25	559	57	7.6	7.3
5	AVNET	655	922	-11	1694	-4	51.2	-10	1175	0	5.9	6.3
6	STAPLES	918	551	131	547	83	7.9	117	280	38	5.5	5.8
7	ANTHEM ELECTRONICS	977	485	45	420	3	23.3	0	182	25	15.7	15.6

21C POLLUTION CONTROL

	GROUP COMPOSITE		32949	7	13065	18	882.8	-29	19222	18	8.2	12.1
1	WASTE MANAGEMENT	25	20916	1	7551	25	606.3	-15	11634	17	9.1	14.7
2	CHEMICAL WASTE MANAGEMENT	189	4169	-17	1358	18	100.8	-43	1849	33	8.3	11.5
3	BROWNING-FERRIS INDUSTRIES	213	3547	-15	3183	4	44.6	-82	3693	4	3.5	3.9
4	CHAMBERS DEVELOPMENT	350	2155	61	322	25	49.9	45	1109	42	8.1	8.9
5	CALGON CARBON	679	866	-19	308	8	38.1	-4	305	21	16.0	17.4
6	ROLLINS ENVIRONMENTAL SERVICES	713	805	15	223	8	25.9	-7	261	10	13.9	14.1
7	MID-AMERICAN WASTE SYSTEMS	972	491	48	120	53	17.1	103	371	125	6.5	7.8

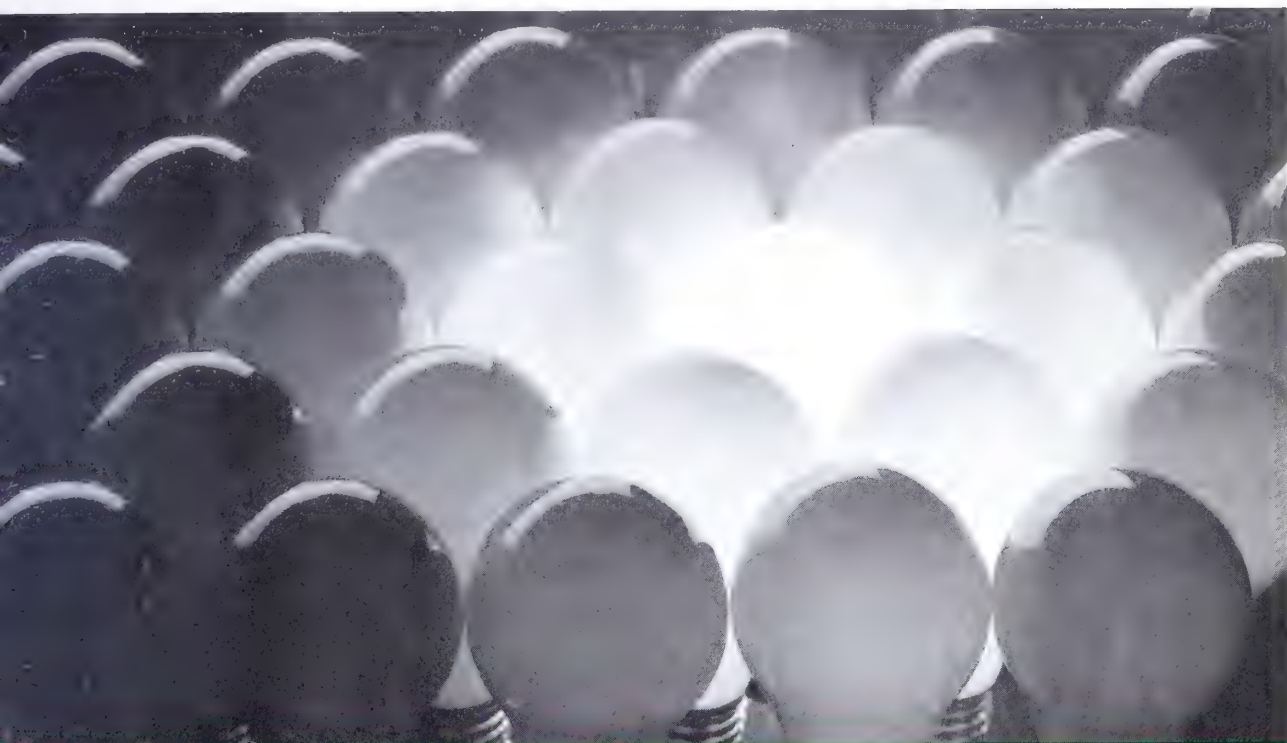
21D PRINTING & ADVERTISING

GROUP COMPOSITE		6943	15	6828	13	356.5	0	7356	7	12.4	14.0	
1	R.R. DONNELLEY & SONS	199	3913	4	3915	12	204.9	-9	3404	2	10.4	11.8
2	INTERPUBLIC GROUP	366	2054	35	1678	23	94.6	18	2336	24	16.6	18.8
3	OMNICOM GROUP	625	976	34	1236	5	57.1	10	1616	0	14.5	17.8

21E OTHER SERVICES

	GROUP COMPOSITE		9058	5	9004	13	396.2	-23	7871	29	10.2	14.5
1	SAFETY-KLEEN	488	1437	-31	695	18	51.6	-7	860	31	8.8	11.5
2	SERVICE CORP. INTERNATIONAL	507	1361	19	643	14	73.4	15	2123	28	8.3	12.7
3	CINTAS	519	1310	50	364	14	33.0	12	340	10	13.3	15.7
4	KELLY SERVICES	589	1069	-11	1438	-2	38.6	-46	479	8	11.1	11.1
5	SOOTHEBY'S HOLDINGS	741	766	1	251	-46	22.3	-83	556	-15	NA	9.8
6	JWP	770	723	-12	3594	27	60.3	2	2281	54	10.8	13.9
7	ROLLINS	788	705	25	476	9	31.5	15	205	15	30.0	30.0
8	JENNY CRAIG	813	674	NA	444	NA	38.6	NA	117	NA	NA	NM

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The Energy To Change





	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL.	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL.	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
9	HANDLEMAN	956	507	30	892	24	32.7	39	732	45	8.4	13.2
10	INFORMATION RESOURCES	957	507	45	208	25	14.2	197	179	42	12.3	11.6

22 TELECOMMUNICATIONS

INDUSTRY COMPOSITE	238185	0	173240	3	10268.5	-29	330081	#	7.8	9.6
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22A EQUIPMENT & SERVICES

	GROUP COMPOSITE		84423	16	66690	5	866.6	-77	93145	8	4.8	3.3
1	AMERICAN TELEPHONE & TELEGRAPH	7	49426	37	44651	2	522.0	-83	53355	10	3.7	3.2
2	MCI COMMUNICATIONS	79	8777	26	8433	10	551.0	84	8884	8	11.9	18.7
3	MCCAW CELLULAR COMMUNICATIONS	131	5739	33	1366	32	-351.1	NM	8717	0	NM	-20.1
4	SPRINT	169	4769	-14	8780	5	367.5	19	10500	-1	10.2	14.8
5	LIN BROADCASTING	201	3881	16	468	24	-170.2	NM	2799	4	-18.6	NM
6	CONTEL CELLULAR	385	1949	-12	235	41	-118.9	NM	1814	13	NM	NM
7	METRO MOBILE CTS	500	1392	53	244	1	-101.7	NM	424	8	NM	NM
8	TELEPHONE & DATA SYSTEMS	522	1294	22	354	20	21.1	-22	1368	46	3.2	3.2
9	U.S. CELLULAR	569	1117	94	99	59	-24.4	NM	617	120	NM	-6.9
10	CENTURY TELEPHONE ENTERPRISES	577	1096	17	281	12	37.4	20	765	8	NA	12.2
11	PACIFIC TELECOM	649	938	-21	724	6	89.5	-6	1686	-2	12.3	15.1
12	COMMUNICATIONS SATELLITE	714	795	52	523	14	71.4	NM	1393	13	8.0	12.2
13	VANGUARD CELLULAR SYSTEMS	751	742	51	69	8	-32.7	NM	256	8	NM	-63.3
14	ASSOCIATED COMMUNICATIONS	783	709	28	43	28	-8.7	NM	67	1	NA	-30.4
15	PAGING NETWORK	836	636	NA	166	41	-9.3	NM	178	NA	NM	NM
16	PICTURETEL	884	586	580	78	111	4.0	NM	145	418	3.3	3.4
17	OCTEL COMMUNICATIONS	894	575	79	175	24	19.5	18	179	21	12.5	12.5

22B TELEPHONE COMPANIES

	GROUP COMPOSITE		153762	-7	106550	2	9401.9	-11	236936	3	9.2	11.5
1	GTE	13	26778	26	19621	2	1529.0	-6	42437	6	NA	14.0
2	BELLSOUTH	20	21962	-12	14446	1	1506.9	-8	30942	2	9.8	11.5
3	SOUTHWESTERN BELL	30	17449	8	9332	2	1156.5	5	23179	4	11.2	13.2
4	BELL ATLANTIC	33	16731	-12	12280	0	1331.6	1	27882	0	NA	14.2
5	AMERITECH	36	15798	-8	10818	1	1165.5	-7	22290	3	12.0	14.4
6	PACIFIC TELESIS GROUP	37	15790	-6	9895	2	1015.0	-1	21838	1	10.6	13.1
7	NYNEX	42	14671	-4	13229	-3	600.8	-37	27478	3	6.6	6.3
8	US WEST	46	13835	-8	10577	6	553.4	-54	27854	3	6.5	5.8
9	CENTEL	209	3617	28	1181	3	112.4	139	3492	-1	8.0	9.6
10	ALLTEL	244	3085	0	1748	11	189.0	-2	2788	6	11.8	17.5
11	SOUTHERN NEW ENGLAND TELECOMMS.	392	1879	-15	1633	1	125.9	-5	3539	3	8.6	10.8
12	CINCINNATI BELL	562	1132	-22	1088	7	42.7	-53	1743	5	7.2	6.7
13	ROCHESTER TELEPHONE	600	1035	25	703	17	73.3	47	1475	25	NA	12.9

23 TRANSPORTATION

INDUSTRY COMPOSITE	65424	33	106427	#	-701.1	NM	131302	5	NM	-2.3
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23A AIRLINES

GROUP COMPOSITE			15169	25	42619	8	-1057.2	NM	43101	16	NM	-11.8
1	AMR	153	5157	42	12887	10	-239.9	NM	15795	18	NM	-6.1
2	UAL	211	3555	12	11663	6	-331.9	NM	9327	12	NM	-18.0
3	DELTA AIR LINES	219	3422	7	10020	15	-239.5	NM	9083	24	NM	-14.1

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	COMPANY	MARKET VALUE		SALES		PROFITS		ASSETS		RETURN		
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
4	SOUTHWEST AIRLINES	441	1615	44	1314	11	26.9	-43	1837	25	4.7	4.3
5	USAIR GROUP	711	808	-21	6514	-1	-305.3	NM	6683	4	NM	-31.6
6	ATLANTIC SOUTHEAST AIRLINES	856	613	82	222	19	32.5	28	375	17	12.8	22.8

23B RAILROADS

GROUP COMPOSITE			34135	41	31447	1	-287.8	NM	57035	1	1.9	-1.7
1	UNION PACIFIC	72	9430	25	7029	1	64.0	-90	13150	3	3.6	1.6
2	NORFOLK SOUTHERN	84	8273	19	4451	-4	29.7	-95	10148	-4	0.9	0.7
3	CSX	125	5874	64	8636	5	-76.0	NM	12798	0	2.3	-2.0
4	CONSOLIDATED RAIL	225	3351	74	3252	-4	-207.0	NM	7096	-2	NM	-7.9
5	BURLINGTON NORTHERN	229	3332	46	4559	-2	-306.0	NM	6324	4	NM	-25.5
6	SANTA FE PACIFIC	362	2081	53	2360	3	96.4	NM	5221	3	9.2	9.3
7	ILLINOIS CENTRAL	612	1010	158	550	1	65.4	42	1184	3	15.1	25.1
8	KANSAS CITY SOUTHERN INDUSTRIES	722	785	69	610	16	45.7	10	1114	13	9.6	11.5

23C TRANSPORTATION SERVICES

GROUP COMPOSITE			8171	31	17447	0	206.6	-49	17646	-3	4.9	4.2
1	FEDERAL EXPRESS	261	2931	36	7548	0	-30.9	NM	5806	-6	NM	-1.8
2	FLIGHTSAFETY INTERNATIONAL	411	1753	3	268	-2	72.4	-4	691	11	15.0	15.3
3	RYDER SYSTEM	414	1741	24	5061	-2	65.7	-20	5080	-8	5.8	4.1
4	TRINITY INDUSTRIES	832	644	22	1206	-7	21.6	-31	951	-1	5.9	6.3
5	PHH	888	580	19	1997	0	47.7	-5	4358	1	NA	11.8
6	AIRBORNE FREIGHT	935	523	22	1367	16	30.0	-11	761	31	6.9	9.7

23D TRUCKING & SHIPPING

GROUP COMPOSITE			7948	18	14914	4	437.2	15	13520	3	7.3	8.7
1	ROADWAY SERVICES	266	2851	60	3177	7	127.3	7	1489	11	14.3	14.3
2	ALEXANDER & BALDWIN	527	1271	3	721	7	92.4	-20	1555	13	NA	12.6
3	YELLOW FREIGHT SYSTEM	677	874	0	2344	2	26.7	-59	1098	-2	5.8	5.6
4	J.B. HUNT TRANSPORT SERVICES	794	694	44	733	26	29.5	-2	520	15	9.4	14.2
5	CONSOLIDATED FREIGHTWAYS	830	649	12	4082	-3	-40.4	NM	2285	-5	NM	-9.7
6	OVERSEAS SHIPHOLDING GROUP	868	603	-4	419	5	55.1	-1	1539	1	7.2	7.4
7	GATX	924	536	-18	989	14	82.7	0	3500	6	9.2	11.7
8	AMERICAN PRESIDENT	994	470	18	2449	8	64.0	NM	1535	-2	NM	12.6

24 UTILITIES & POWER

INDUSTRY COMPOSITE			243075	6	227749	4	17271.4	-3	567009	3	7.5	9.0
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24A ELECTRIC, WATER & COGENERATION

GROUP COMPOSITE			219349	9	177979	5	16957.7	2	497493	3	7.9	10.0
1	PACIFIC GAS & ELECTRIC	50	12423	20	9778	3	1026.4	4	22901	4	NA	12.4
2	SOUTHERN	69	9627	13	8050	0	984.5	37	22888	0	9.1	12.6
3	SCECORP	76	8963	10	7503	4	744.8	-10	18119	4	9.5	12.4
4	TEXAS UTILITIES	88	8007	13	4893	8	-288.4	NM	18793	1	NM	-6.5
5	COMMONWEALTH EDISON	91	7523	-9	6276	18	94.9	-26	20084	-2	1.6	0.3
6	DUKE POWER	107	6474	19	3817	3	583.6	8	10471	4	9.8	13.0
7	PUBLIC SERVICE ENTERPRISE GROUP	119	6036	6	5093	6	573.3	0	14820	6	8.7	11.4
8	CONSOLIDATED EDISON CO. OF N.Y.	132	5736	6	5873	2	566.9	-1	11207	7	8.6	11.4
9	AMERICAN ELECTRIC POWER	136	5674	7	5047	-3	551.5	0	14125	2	9.0	11.8
10	FPL GROUP	139	5656	21	5249	3	417.4	22	11282	4	9.1	11.2

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	COMPANY	MARKET VALUE		SALES		PROFITS		ASSETS		RETURN		
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
11	PACIFICORP	141	5576	4	4007	4	507.2	7	13229	7	NA	14.1
12	DOMINION RESOURCES	144	5480	19	3786	7	511.6	2	11201	2	9.1	12.0
13	HOUSTON INDUSTRIES	148	5296	18	4444	6	463.6	20	12051	1	8.7	11.8
14	PHILADELPHIA ELECTRIC	150	5253	28	3976	7	534.7	405	12544	0	8.8	12.1
15	ENTERGY	157	5001	11	4051	2	544.8	1	14612	-1	8.8	11.4
16	CENTRAL & SOUTH WEST	166	4801	22	3047	11	401.0	4	9388	3	10.3	13.2
17	DETROIT EDISON	179	4556	11	3592	0	568.0	10	10464	-1	11.6	19.2
18	CAROLINA POWER & LIGHT	190	4169	12	2686	3	377.0	34	7523	0	10.2	14.7
19	PENNSYLVANIA POWER & LIGHT	208	3668	13	2560	6	348.4	1	7935	3	NA	13.3
20	UNION ELECTRIC	227	3345	13	2097	4	321.5	9	5733	1	10.1	14.3
21	OHIO EDISON	265	2861	6	2359	5	272.5	-7	7812	0	7.7	10.1
22	GENERAL PUBLIC UTILITIES	275	2798	9	3372	9	311.8	-1	7470	8	9.2	11.8
23	WHEELABRATOR TECHNOLOGIES	278	2777	32	1173	2	126.0	166	2664	17	8.9	15.9
24	NORTHEAST UTILITIES	280	2758	23	2754	5	279.3	9	6782	3	7.7	12.6
25	POTOMAC ELECTRIC POWER	290	2653	21	1552	10	210.2	23	5854	12	7.0	11.5
26	BALTIMORE GAS & ELECTRIC	295	2608	13	2460	12	233.7	33	7079	6	7.7	8.9
27	LONG ISLAND LIGHTING	296	2575	5	2549	4	305.5	-4	9543	8	8.1	11.2
28	CENTERIOR ENERGY	302	2540	-2	2560	5	297.9	-9	12042	1	7.0	8.3
29	NORTHERN STATES POWER	305	2517	20	2201	7	207.1	7	4787	1	8.9	12.0
30	WISCONSIN ENERGY	313	2475	15	1539	7	195.2	1	3496	4	9.7	13.1
31	NIAGARA MOHAWK POWER	320	2433	25	3383	7	243.4	194	8241	6	7.5	9.6
32	SAN DIEGO GAS & ELECTRIC	325	2408	0	1789	1	208.1	0	3748	2	NA	14.5
33	ALLEGHENY POWER SYSTEM	333	2339	15	2282	-1	212.6	1	4855	6	NA	11.6
34	FLORIDA PROGRESS	335	2336	14	2075	3	191.3	-3	5025	0	9.7	11.0
35	TECO ENERGY	353	2134	16	1154	5	148.9	4	2834	13	10.7	16.3
36	CINCINNATI GAS & ELECTRIC	361	2082	30	1518	6	207.0	-12	4584	10	9.5	11.5
37	CITIZENS UTILITIES	369	2027	56	525	8	111.0	5	1610	29	11.9	16.2
38	NEW ENGLAND ELECTRIC SYSTEM	387	1925	16	2094	10	190.4	-30	4450	1	8.6	12.6
39	NEW YORK STATE ELECTRIC & GAS	404	1799	13	1556	4	168.6	7	4925	4	7.9	10.6
40	CMS ENERGY	409	1766	-32	2941	-1	-250.0	NM	7154	-16	NA	-21.8
41	ILLINOIS POWER	417	1715	24	1475	0	109.2	NM	5272	-1	NM	5.3
42	DPL	422	1682	23	1006	5	129.0	-21	2973	2	9.1	11.1
43	SCANA	440	1616	10	1148	0	142.6	-24	3306	5	NA	13.6
44	OKLAHOMA GAS & ELECTRIC	452	1551	-1	1315	7	133.9	-4	2566	2	10.1	14.5
45	NIPSCO INDUSTRIES	458	1533	16	1535	1	145.1	5	3648	1	9.6	12.9
46	PINNACLE WEST CAPITAL	470	1501	49	1475	-7	-306.9	NM	6483	-8	NM	-25.7
47	DQE	473	1492	13	1199	6	144.4	6	3909	1	NA	12.0
48	PUBLIC SERVICE CO. OF COLORADO	478	1478	20	1795	4	149.7	2	3473	7	10.7	13.3
49	AES	494	1420	NA	334	75	42.6	175	1440	28	NA	33.3
50	PUGET SOUND POWER & LIGHT	511	1347	11	957	2	132.8	0	2485	3	9.1	13.0
51	GULF STATES UTILITIES	513	1340	8	1702	1	122.4	NM	6911	1	6.2	3.0
52	KANSAS CITY POWER & LIGHT	524	1288	16	825	1	103.9	1	2615	1	8.6	11.4
53	SOUTHWESTERN PUBLIC SERVICE	529	1268	13	726	-3	109.7	-2	1660	0	10.8	15.2
54	MONTANA POWER	531	1266	21	498	11	105.7	11	2077	5	9.4	12.3
55	DESTEC ENERGY	532	1261	-16	437	6	81.5	16	624	NA	18.4	18.0
56	IPALCO ENTERPRISES	546	1197	19	648	4	105.2	3	1817	0	10.2	13.3
57	DELMARVA POWER & LIGHT	584	1080	21	845	4	80.5	116	2264	7	7.7	10.3
58	ATLANTIC ENERGY	604	1024	26	778	9	102.0	28	2151	7	8.9	11.3
59	KANSAS GAS & ELECTRIC	605	1023	28	595	1	53.6	-16	2357	0	7.7	8.3
60	MIDWEST RESOURCES	615	994	2	1025	11	73.8	9	2384	3	NA	10.9
61	UTILICORP UNITED	628	973	58	1075	20	73.5	25	2402	30	8.8	12.6
62	LG&E ENERGY	629	968	15	715	2	92.4	12	2054	3	8.6	12.3



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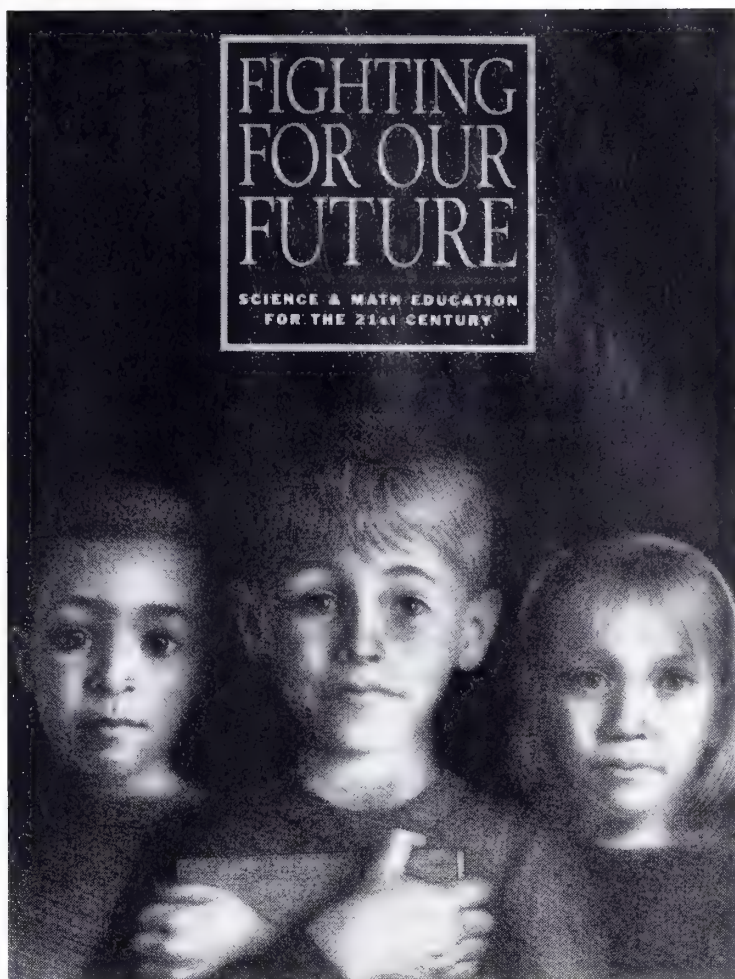
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	COMPANY	MARKET VALUE			SALES		PROFITS		ASSETS		RETURN	
		TOP 1000 RANK	\$ MIL	CHANGE FROM 1991 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	12 MONTHS 1991 \$ MIL	CHANGE FROM 1990 %	ON INVESTED CAPITAL %	ON COMMON EQUITY %
63	BOSTON EDISON	637	957	23	1320	5	94.7	19	3120	4	9.5	10.2
64	KANSAS POWER & LIGHT	645	942	20	1162	1	72.3	-9	2120	5	8.6	10.5
65	KU ENERGY	658	917	19	588	6	83.6	4	1426	0	10.7	14.2
66	MINNESOTA POWER	663	903	5	484	1	75.5	1	1547	1	10.7	15.1
67	CIPSCO	664	900	16	722	3	77.5	9	1754	2	8.8	11.8
68	PSI RESOURCES	671	888	-7	1122	1	29.2	-77	2054	0	4.9	2.7
69	IDAHO POWER	673	879	-5	483	4	57.9	-16	1774	6	7.7	9.1
70	HAWAIIAN ELECTRIC INDUSTRIES	685	859	19	1084	7	61.7	22	3905	6	6.7	9.6
71	OGDEN PROJECTS	698	832	2	364	-1	52.6	46	2020	8	6.9	20.9
72	WPL HOLDINGS	704	822	20	649	5	68.7	9	1376	9	10.5	14.2
73	WASHINGTON WATER POWER	725	784	13	567	2	70.6	-2	1522	8	8.1	11.5
74	PORTLAND GENERAL	753	742	-11	890	4	-7.8	NM	2726	6	2.4	-2.8
75	PUBLIC SERVICE CO. OF NEW HAMPSHIRE	757	740	440	746	13	-73.7	NM	2610	6	NM	-11.7
76	ROCHESTER GAS & ELECTRIC	765	730	19	853	3	58.0	-3	1954	5	7.6	8.6
77	AMERICAN WATER WORKS	785	708	24	633	11	76.4	28	2241	7	9.2	12.4
78	IES INDUSTRIES	814	671	64	662	6	46.8	-43	1449	3	7.6	9.6
79	IOWA-ILLINOIS GAS & ELECTRIC	822	665	20	513	0	54.4	-2	1544	8	6.9	11.3
80	NEVADA POWER	852	617	0	539	12	35.2	41	1314	5	NA	6.9
81	CENTRAL MAINE POWER	866	604	27	867	11	59.1	21	1567	8	9.3	11.1
82	WISCONSIN PUBLIC SERVICE	870	601	6	624	6	54.2	11	1074	6	9.3	14.0
83	SIERRA PACIFIC RESOURCES	902	565	10	469	0	46.3	-4	1369	4	7.8	9.8
84	MAGMA POWER	941	516	-24	95	11	33.9	13	357	10	13.4	15.6
85	CENTRAL LOUISIANA ELECTRIC	950	512	20	337	1	44.9	6	973	6	9.1	13.0
86	SOUTHERN INDIANA GAS & ELECTRIC	978	485	26	323	0	38.5	2	747	1	10.0	14.4
87	UNITED ILLUMINATING	982	477	3	673	5	48.2	-11	2263	-3	7.3	11.0
88	PUBLIC SERVICE CO. OF NEW MEXICO	993	470	22	857	-3	24.5	5441	2349	2	4.2	2.0
89	CILCORP	995	470	15	590	9	44.9	10	1148	-1	8.6	11.8

24B GAS, OIL & TRANSMISSION

GROUP COMPOSITE		23727	-14	49770	1	313.6	-74	69515	3	4.7	1.1	
1	ENRON	217	3429	24	13520	3	241.8	20	9838	0	NA	12.8
2	CONSOLIDATED NATURAL GAS	250	2993	-20	2607	-4	168.6	3	4642	1	8.8	9.2
3	PANHANDLE EASTERN	447	1582	19	2454	-18	85.1	NM	6177	-4	7.0	6.5
4	WILLIAMS	464	1509	16	2105	16	110.0	43	4123	2	NA	9.5
5	PACIFIC ENTERPRISES	510	1351	-54	6599	-5	-80.0	NM	6701	-8	1.9	-6.2
6	SONAT	517	1315	-32	1421	5	77.9	-15	3174	4	7.2	6.7
7	NICOR	555	1156	1	1516	-1	108.6	-4	2095	4	NA	15.4
8	ARKLA	568	1121	-35	2778	15	18.0	-82	5010	35	4.8	0.9
9	COLUMBIA GAS SYSTEM	639	954	-54	2577	9	-794.8	NM	5850	1	NM	-95.5
10	PEOPLES ENERGY	665	899	21	1118	3	72.1	24	1642	1	9.6	12.3
11	BROOKLYN UNION GAS	707	817	14	1005	5	65.5	11	1828	16	6.8	9.7
12	NATIONAL FUEL GAS	724	785	11	875	1	54.8	12	1680	9	9.5	9.8
13	ENSERCH	733	774	-39	2835	1	19.1	-77	3166	0	5.3	0.7
14	EQUITABLE RESOURCES	735	772	1	680	3	64.2	9	1375	17	10.5	11.7
15	QUESTAR	756	741	3	632	18	64.0	11	1220	6	10.6	13.3
16	ATLANTA GAS LIGHT	760	735	5	969	1	46.7	-3	1481	4	9.7	9.9
17	WASHINGTON GAS LIGHT	819	666	16	705	3	47.2	11	1119	6	9.0	10.7
18	MCN	883	587	17	1276	6	36.0	6	1517	1	8.8	11.6
19	EASTERN ENTERPRISES	923	541	-20	993	5	29.4	-54	1199	5	5.6	5.7
20	TRANSCO ENERGY	925	533	-49	2739	-11	-158.4	NM	4682	10	NM	-36.1
21	MDU RESOURCES GROUP	997	468	19	367	10	38.0	36	996	0	8.8	12.5



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November 25, 1991

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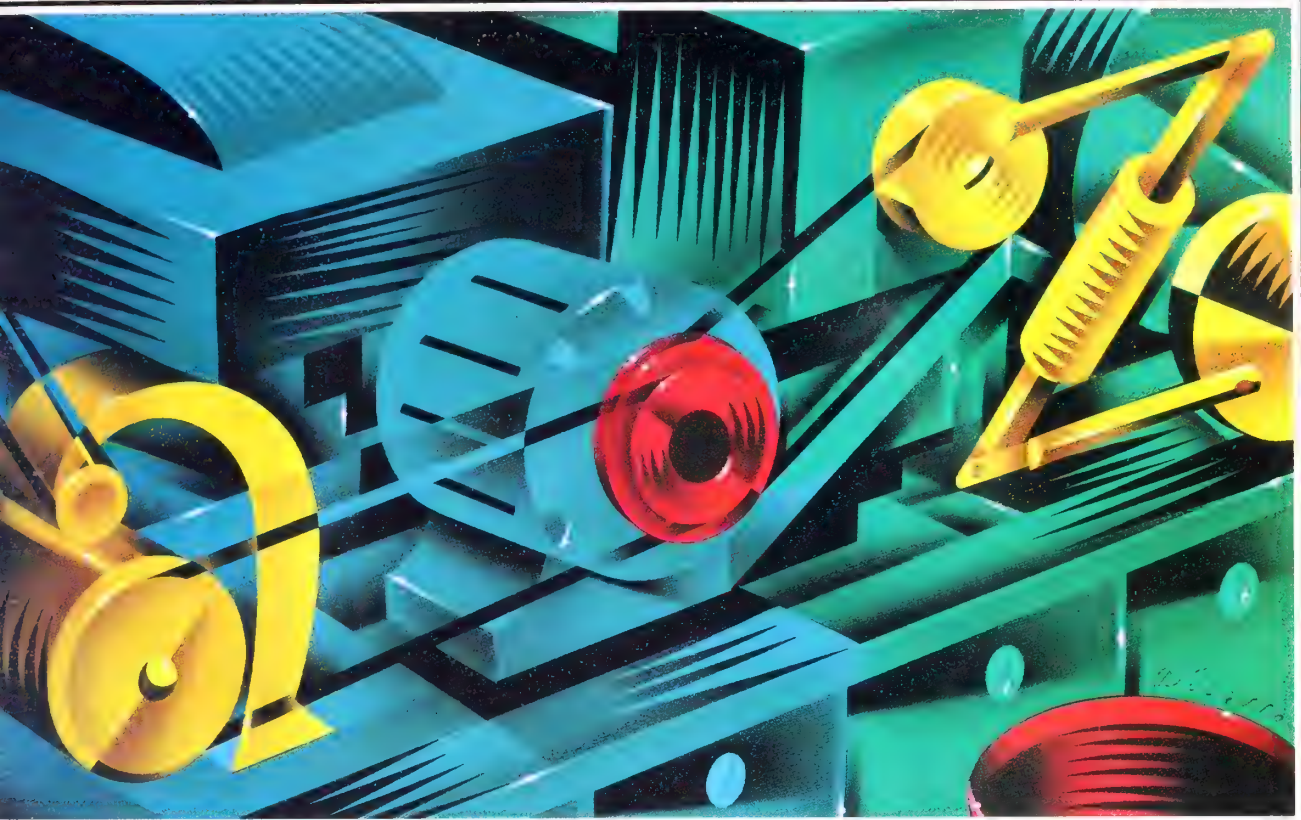
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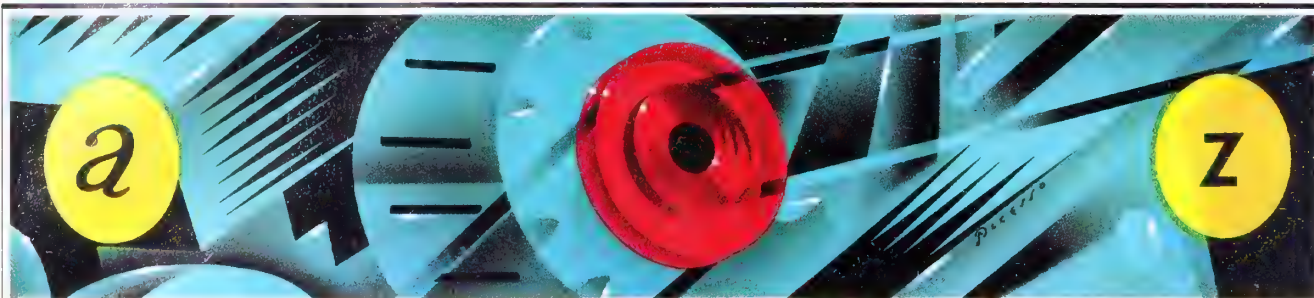


ALPHABETICAL LIST OF COMPANIES

The number to the left of the company's name identifies its rank in market value among The Business Week 1000. That list begins on page 118. The numbers immediately to the right identify the company's rank in sales, profits, and assets, respectively, among all Business Week 1000 companies. The number in the far right column identifies the company's industry code for reference to the special industries section beginning on page 164.

MKT RANK	COMPANY	OTHER RANKINGS			IND NO	MKT RANK	COMPANY	OTHER RANKINGS			IND NO	MKT RANK	COMPANY	OTHER RANKINGS			IND NO
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
14	ABBOTT LABORATORIES One Abbott Park Rd, Abbott Park, IL 60064/708-937-6100	134	29	252	12	935	AIRBORNE FREIGHT 3101 Western Ave, Seattle, WA 98121/206-285-4600	522	720	748	23	102	ALLIED-SIGNAL 101 Columbia Rd, Morristown, NJ 07962/201-455-2000	65	972	167	5
773	ACUSON 1220 Charleston Rd, Mountain View, CA 94039/415-969-9112	873	521	900	12	969	ALBANY INTERNATIONAL 1373 Broadway, Albany, NY 12204/518-445-2200	779	853	771	15	244	ALLTEL One Allied Dr, Little Rock, AR 72202/501-661-8000	434	212	414	22
572	ADOBE SYSTEMS 1585 Charleston Rd, Mountain View, CA 94043/415-961-4400	918	556	943	18	807	ALBERTO-CULVER 2525 Armitage Ave, Melrose Park, IL 60160/708-450-3000	633	707	809	6	952	ALTERA 2610 Orchard Pkwy, San Jose, CA 95134/408-984-2800	972	824	984	9
487	ADVANCED MICRO DEVICES 901 Thompson Place, Sunnyvale, CA 94088/408-732-2400	551	260	624	9	133	ALBERTSON'S 250 Parkcenter Blvd, Boise, ID 83726/208-385-6200	110	159	475	10	240	ALZA 950 Page Mill Rd, Palo Alto, CA 94304/415-494-5000	958	927	803	12
967	ADVANTA 300 Welsh Rd, Harsham, PA 19044/215-657-4000	935	764	549	17	430	ALCO STANDARD PO Box 834, Valley Forge, PA 19482/215-296-8000	194	384	517	5	403	AMAX 200 Park Ave, New York, NY 10166/212-856-4200	244	717	276	16
494	AES 1001 North 19th St, Arlington, VA 22209/703-522-0073	875	624	599	24	122	ALCOA 1501 Alcoa Bldg, Pittsburgh, PA 15219/412-553-4545	91	502	151	16	780	AMAX GOLD 350 Indiana St, Golden, CO 80401/303-273-0600	961	797	950	16
165	AETNA LIFE & CASUALTY 151 Farmington Ave, Hartford, CT 06156/203-273-0123	29	88	15	17	686	ALEXANDER & ALEXANDER 1211 Ave of the Americas, New York, NY 10036/212-840-8500	520	893	416	17	544	AMBAC One State St Plaza, New York, NY 10004/212-668-0340	941	318	600	17
759	AFFILIATED PUBLICATIONS 135 Morrissey Blvd, Boston, MA 02107/617-929-2000	851	931	830	20	527	ALEXANDER & BALDWIN 822 Bishop St, Honolulu, HI 96813/808-525-6611	706	380	568	23	386	AMDAHL 1250 East Arques Ave, Sunnyvale, CA 94088/408-746-6000	441	866	456	18
328	AFLAC 1932 Wynnston Rd, Columbus, GA 31999/404-323-3431	270	253	173	17	730	ALLEGHANY 55 East 52nd St, New York, NY 10055/212-752-1356	514	793	316	17	232	AMERADA HESS 1185 Ave of the Americas, New York, NY 10036/212-997-8500	150	401	207	11
370	AHMANSON (H.F.) 4900 Rivergrave Rd, Irwindale, CA 91706/818-960-6311	204	166	31	17	575	ALLEGHENY LUDLUM 1000 Six PPG Place, Pittsburgh, PA 15222/412-394-2800	616	633	746	16	77	AMERICAN BRANDS 1700 East Putnam Ave, Old Greenwich, CT 06870/203-698-5000	44	43	120	6
162	AIR PRODUCTS & CHEMS. 7201 Hamilton Blvd, Allentown, PA 18195/215-481-4911	298	162	320	4	333	ALLEGHENY POWER 12 East 49th St, New York, NY 10017/212-752-2121	373	186	305	24	124	AMERICAN CYANAMID One Cyanamid Plaza, Wayne, NJ 07470/201-831-2000	187	119	287	4
						432	ALLERGAN 2525 Dupont Dr, Irvine, CA 92713/714-752-4500	671	924	727	12	136	AMERICAN ELECTRIC One Riverside Plaza, Columbus, OH 43215/614-223-1000	186	73	116	24
						873	ALLIANCE PHARM. 3040 Science Park Rd, San Diego, CA 92121/619-558-4300	1000	902	983	12	60	AMERICAN EXPRESS American Express Tower, World Finl Ctr, New York, NY 10285/212-640-2000	19	44	5	17

ALPHABETICAL LIST OF COMPANIES

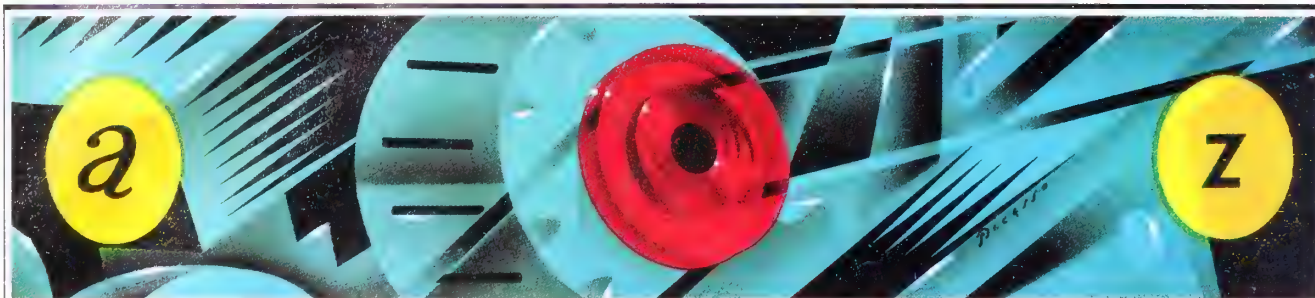


The number to the left of the company's name identifies its rank in market value among The Business Week 1000.
For explanation of other rankings, see page 164.

MKT RANK	COMPANY	OTHER RANKINGS	IND NO	MKT RANK	COMPANY	OTHER RANKINGS	IND NO	MKT RANK	COMPANY	OTHER RANKINGS	IND NO
SALES	PROFITS	ASSETS	SALES	PROFITS	ASSETS	SALES	PROFITS	ASSETS	SALES	PROFITS	ASSETS
177	AMERICAN GENERAL	217	92	45	17						
	2929 Allen Pkwy, Houston, TX 77019/713-522-1111										
479	AMERICAN GREETINGS	494	378	591	14						
	10500 American Rd, Cleveland, OH 44144/216-252-7300										
953	AMERICAN HEALTH	980	689	786	12						
	11150 Santa Monica Blvd, Los Angeles, CA 90025/310-477-9399										
17	AMERICAN HOME PRODS.	127	17	270	12						
	685 Third Ave, New York, NY 10017/212-878-5000										
29	AMERICAN INTL. GROUP	37	11	20	17						
	70 Pine St, New York, NY 10270/212-770-7000										
799	AMERICAN MEDICAL	355	870	387	12						
	8201 Preston Rd, Dallas, TX 75225/214-360-6300										
592	AMERICAN NATIONAL	564	293	295	17						
	One Moody Plaza, Galveston, TX 77550/409-763-4661										
786	AMERICAN POWER	975	833	999	9						
	132 Fairgrounds Rd, West Kingston, RI 02892/401-789-5735										
994	AMERICAN PRESIDENT	356	494	573	23						
	1111 Broadway, Oakland, CA 94607/510-272-8000										
319	AMERICAN STORES	23	170	224	10						
	709 East South Temple, Salt Lake City, UT 84102/801-539-0112										
113	AMERICAN TV	553	236	498	20						
	300 First Stamford Place, Stamford, CT 06902/203-328-0600										
785	AMERICAN WATER WORKS	745	435	469	24						
	1025 Laurel Oak Rd, Voorhees, NJ 08043/609-346-8200										
36	AMERITECH	78	23	82	22						
	30 South Wacker Dr, Chicago, IL 60606/312-750-5000										
505	AMERITRUST	587	945	170	3						
	900 Euclid Ave, Cleveland, OH 44115/216-737-5000										
754	AMETEK	708	653	797	9						
	Station Square, Paoli, PA 19301/215-647-2121										
87	AMGEN	720	358	717	12						
	Amgen Center, Thousand Oaks, CA 91320/805-499-5725										
21	AMOCO	20	22	59	11						
	200 East Randolph Dr, Chicago, IL 60601/312-856-6111										
106	AMP	290	158	391	9						
	470 Friendship Rd, Harrisburg, PA 17111/717-564-9101										
153	AMR	54	969	104	23						
	4333 Amon Carter Blvd, Fort Worth, TX 76155/817-963-1234										
919	AMSCO INTERNATIONAL	845	738	906	12						
	One Mellon Bank Center, Pittsburgh, PA 15219/412-338-6500										
635	AMSOUTH BANCORP.	638	422	186	3						
	1900 Fifth Ave, North Birmingham, AL 35288/205-326-5120										
588	ANADARKO PETROLEUM	871	702	554	11						
	16855 Northchase Dr, Houston, TX 77060/713-875-1101										
39	ANHEUSER-BUSCH	76	35	176	6						
	One Busch Place, St. Louis, MO 63118/314-577-2000										
977	ANTHEM ELECTRONICS	841	778	957	21						
	1160 Ridder Park Dr, San Jose, CA 95131/408-453-1200										
282	AON	305	168	156	17						
	123 North Wacker Dr, Chicago, IL 60606/312-701-3000										
872	APACHE	865	684	647	11						
	1700 Lincoln St, Denver, CO 80203/303-837-5000										
90	APPLE COMPUTER	148	129	352	18						
	20525 Mariani Ave, Cupertino, CA 95014/408-996-1010										
734	APPLIED MATERIALS	731	737	772	15						
	3050 Bowers Ave, Santa Clara, CA 95054/408-727-5555										
78	ARCHER DANIELS MIDLAND	105	89	226	10						
	4666 Faries Pkwy, Decatur, IL 62526/217-424-5200										
212	ARCO CHEMICAL	309	214	356	4						
	3801 West Chester Pike, Newtown Square, PA 19073/215-359-2000										
778	ARGONAUT GROUP	798	400	518	17						
	1800 Ave of the Stars, Los Angeles, CA 90067/213-553-0561										
568	ARKLA	317	821	298	24						
	525 Milam St, Shreveport, LA 71101/318-429-2700										
928	ARMCO	473	980	491	16						
	300 Interpace Pkwy, Parsippany, NJ 07054/201-316-5200										
548	ARMSTRONG WORLD	358	511	479	6						
	313 West Liberty St, Lancaster, PA 17603/717-397-0611										
939	ARTISOFT	990	854	995	18						
	691 East River Rd, Tucson, AZ 85704/602-293-6363										
970	ARVIN INDUSTRIES	453	791	664	2						
	One Mobilitt Plaza, Columbus, IN 47201/812-379-3000										
581	ASARCO	423	587	396	16						
	180 Maiden Lane, New York, NY 10038/212-510-2000										
395	ASHLAND OIL	99	215	282	11						
	1000 Ashland Dr, Russell, KY 41169/606-329-3333										
783	ASSOCIATED COMMUNS.	993	889	996	22						
	200 Gateway Towers, Pittsburgh, PA 15222/412-281-1907										
847	AST RESEARCH	678	469	823	18						
	16215 Alton Pkwy, Irvine, CA 92713/714-727-4141										
7	AT&T	9	80	25	22						
	550 Madison Ave, New York, NY 10022/212-605-5500										
760	ATLANTA GAS LIGHT	627	582	586	24						
	235 Peachtree St NE, Atlanta, GA 30303/404-584-4000										
604	ATLANTIC ENERGY	690	345	477	24						
	1199 Black Horse Pike, Pleasantville, NJ 08232/609-645-4100										
34	ATLANTIC RICHFIELD	35	48	73	11						
	515 South Flower St, Los Angeles, CA 90071/213-486-3511										
856	ATLANTIC SOUTHEAST AIR	925	701	885	23						
	1688 Phoenix Pkwy, College Park, GA 30349/404-996-4562										
793	AUTODESK	891	527	904	18						
	2320 Marinship Way, San Jose, CA 94965/415-332-2344										
118	AUTOMATIC DATA	427	171	557	18						
	One ADP Blvd, Roseland, NJ 07068/201-994-5000										
304	AUTOZONE	652	566	868	8						
	3030 Poplar Ave, Memphis, TN 38111/901-325-4600										
429	AVERY DENNISON	344	501	542	15						
	150 North Orange Grove Blvd, Pasadena, CA 91103/818-304-2000										
655	AVNET	444	557	656	21						
	80 Cutter Mill Rd, Great Neck, NY 11021/516-466-7000										
226	AVON PRODUCTS	249	187	544	6						
	Nine West 57th St, New York, NY 10019/212-546-6015										
287	BAKER HUGHES	322	233	399	11						
	3900 Essex Ln, Houston, TX 77027/713-439-8600										
627	BALL	378	479	565	7						
	345 South High St, Muncie, IN 47305/317-747-6100										
864	BALLARD MEDICAL	994	852	1000	12						
	12050 South Lane Pkwy, Draper, UT 84020/801-572-6800										
295	BALTIMORE G&E	353	174	223	24						
	39 West Lexington, Baltimore, MD 21201/301-234-5000										
81	BANC ONE	224	78	51	3						
	100 East Broad St, Columbus, OH 43271/614-248-5800										
497	BANCORP HAWAII	610	321	148	3						
	130 Merchant St, Honolulu, HI 96813/808-537-8111										
428	BANDAG	767	424	856	2						
	Bandag Center, Muscatine, IA 52761/319-262-1400										
499	BANK OF BOSTON	210	915	54	3						
	100 Federal St, Boston, MA 02110/617-434-2200										
284	BANK OF NEW YORK	221	306	41	3						
	48 Wall St, New York, NY 10286/212-495-1784										
71	BANKAMERICA	61	27	8	3						
	555 California St, San Francisco, CA 94104/415-622-3456										
163	BANKERS TRUST	135	52	22	3						
	280 Park Ave, New York, NY 10017/212-250-2500										
772	BANPONCE	634	491	201	3						
	209 Ponce de Leon Ave, San Juan, PR 00918/809-765-9800										
496	BARD (C.R.)	647	529	780	12						
	730 Central Ave, Murray Hill, NJ 07974/201-277-8000										
339	BARNETT BANKS	271	301	53	3						
	50 North Laura St, Jacksonville, FL 32202/904-791-7720										
843	BATTLE MOUNTAIN GOLD	947	881	820	16						
	333 Clay St, Houston, TX 77002/713-650-6400										
258	BAUSCH & LOMB	489	397	606	12						
	One Lincoln First Sq, Rochester, NY 14604/716-338-6000										
64	BAXTER INTERNATIONAL	103	62	190	12						
	One Baxter Pkwy, Deerfield, IL 60015/708-948-2000										
861	BB&T FINANCIAL	759	515	253	3						
	223 West Nash St, Wilson, NC 27893/919-399-4111										
379	BEAR STEARNS	347	175	23	17						
	245 Park Ave, New York, NY 10167/212-272-2000										
851	BECKMAN INSTRUMENTS	660	650	761	9						
	2500 Harbor Blvd, Fullerton, CA 92634/714-871-4848										
299	BECTON, DICKINSON	386	219	402	12						
	One Becton Dr, Franklin Lakes, NJ 07417/201-847-6800										
33	BELL ATLANTIC	60	18								

RANK	COMPANY	OTHER RANKINGS			IND. NO.	RANK	COMPANY	OTHER RANKINGS			IND. NO.	RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
60	BEMIS	578	549	760	7	515	BRUNSWICK	396	904	525	14	866	CENTRAL MAINE POWER	656	519	567	24
	222 South Ninth St, Minneapolis, MN 55402/612-376-3000						One Brunswick Plaza, Skokie, IL 60077/708-470-4700						Edison Dr, Augusta, ME 04336/207-623-3521				
34	BENEFICIAL	428	252	175	17	980	BUFFETS	938	850	993	14	893	CENTRAL NEWSPAPERS	840	760	875	20
	400 Bellevue Pkwy, Wilmington, DE 19809/302-798-0800						10260 Viking Dr, Eden Prairie, MN 55344/612-942-9760						135 North Pennsylvania St, Indianapolis, IN 46204/317-231-9201				
00	BERGEN BRUNSWIG	189	534	582	12	229	BURLINGTON NORTHERN	209	977	249	23	748	CENTURY COMMUNS.	887	943	617	20
	4000 Metropolitan Dr, Orange, CA 92668/714-385-4000						777 Main St, Fort Worth, TX 76102/817-878-2000						50 Locust Ave, New Canaan, CT 06840/203-972-2000				
78	BERKLEY (W.R.)	785	583	576	17	170	BURLINGTON RESOURCES	433	205	251	11	577	CENTURY TELEPHONE	896	661	745	22
	165 Mason St, Greenwich, CT 06836/203-629-2880						999 Third Ave, Seattle, WA 98104/206-467-3838						1900 North 18th St, Monroe, LA 71201/318-388-9590				
62	BERKSHIRE HATHAWAY	295	91	128	17	849	BWIP HOLDING	837	710	903	15	350	CHAMBERS DEVELOPMENT	880	559	668	21
	1440 Kiewit Plaza, Omaha, NE 68131/402-346-1400						200 OceanGate Blvd, Long Beach, CA 90802/213-435-3700						10700 Frankstown Rd, Pittsburgh, PA 15235/412-242-6237				
73	BETHLEHEM STEEL	220	991	334	16							317	CHAMPION INTERNATIONAL	195	635	204	19
	701 East Third St, Bethlehem, PA 18016/215-694-2424												One Champion Plaza, Stamford, CT 06921/203-358-7000				
39	BETZ LABORATORIES	725	439	834	4							456	CHARMING SHOPPES	611	522	777	8
	4626 Somerton Rd, Treviso, PA 19053/215-355-3300												450 Winks Lane, Bensalem, PA 19020/215-245-9100				
28	BEVERLY ENTERPRISES	371	733	555	12	443	CABLETRON SYSTEMS	905	553	946	18	246	CHASE MANHATTAN	64	81	12	3
	1700 South Waldron Rd, Fort Smith, AR 72903/501-452-6712						35 Industrial Way, Rochester, NH 03867/603-332-9400						One Chase Manhattan Plaza, New York, NY 10081/212-552-2222				
49	BHC COMMUNICATIONS	906	334	503	20	817	CABLEVISION SYSTEMS	756	967	580	20	135	CHEMICAL BANKING	43	240	7	3
	600 Madison Ave, New York, NY 10022/212-412-0200						One Media Crossways, Woodbury, NY 11797/516-364-8450						277 Park Ave, New York, NY 10172/212-310-6161				
59	BIODEN	986	859	968	12	764	CABOT	503	621	566	4	189	CHEMICAL WASTE	525	348	526	21
	14 Cambridge Center, Cambridge, MA 02142/617-252-9200						75 State St, Boston, MA 02109/617-345-0100						3003 Butterfield Rd, Oak Brook, IL 60521/708-218-1500				
16	BIOMET	910	598	935	12	654	CADENCE DESIGN SYSTEMS	853	903	894	18	948	CHESAPEAKE	670	834	704	19
	Airport Industrial Park, Warsaw, IN 46580/219-267-6639						555 River Oaks Pkwy, San Jose, CA 95134/408-943-1234						1021 East Cary St, Richmond, VA 23219/804-697-1000				
59	BLACK & DECKER	199	548	277	15	678	CAESARS WORLD	629	432	707	14	22	CHEVRON	11	21	47	11
	701 East Joppa Rd, Towson, MD 21204/301-583-3900						1801 Century Park East, Los Angeles, CA 90067/213-552-2711						225 Bush St, San Francisco, CA 94104/415-894-7700				
10	BLOCK (HER)	530	245	768	17	679	CALGON CARBON	884	651	912	21	420	CHIUQUITA BRANDS INTL.	200	286	400	10
	4410 Main St, Kansas City, MO 64111/816-753-6900						500 Calgon Carbon Dr, Robinson Twp, PA 15205/412-787-6700						250 East Fifth St, Cincinnati, OH 45202/513-784-8000				
10	BLOCK DRUG	782	533	792	6	869	CALMAT	859	815	813	13	634	CHIRON	985	847	861	12
	257 Cornalison Ave, Jersey City, NJ 07302/201-434-3000						3200 San Fernando Rd, Los Angeles, CA 90065/213-258-2777						4560 Horton St, Emeryville, CA 94608/415-655-8730				
46	BLOCKBUSTER ENT.	653	373	735	14	74	CAMPBELL SOUP	157	100	322	10	810	CHRIS-CRAFT INDUSTRIES	892	523	501	20
	901 East Los Ollas Blvd, Fort Lauderdale, FL 33301/305-524-8200						Campbell Place, Camden, NJ 08103/609-342-4800						600 Madison Ave, New York, NY 10022/212-412-0200				
48	BMC SOFTWARE	943	615	947	18	92	CAPITAL CITIES/ABC	177	114	221	20	173	CHRYSLER	16	987	37	2
	One Sugar Creek Center, Sugar Land, TX 77478/713-240-8800						77 West 66th St, New York, NY 10023/212-456-7777						12000 Chrysler Dr, Highland Park, MI 48288/313-956-5741				
38	BOATMEN'S BANCSHARES	475	247	95	3	289	CAPITAL HOLDING	331	163	88	17	137	CHUBB	206	72	119	17
	800 Market St, St. Louis, MO 63101/314-466-6600						680 Fourth Ave, Louisville, KY 40202/502-560-2000						15 Mountain View Rd, Warren, NJ 07059/908-580-2000				
06	BOB EVANS FARMS	786	655	908	14	917	CARDINAL DISTRIBUTION	496	784	785	12	898	CHURCH & DWIGHT	813	753	941	6
	3776 South High St, Columbus, OH 43207/614-491-2225						655 Metro Place South, Dublin, OH 43017/614-761-8700						469 North Harrison St, Princeton, NJ 08543/609-683-5900				
35	BOEING	17	10	100	1	176	CARNIVAL CRUISE LINES	515	161	401	14	195	CIGNA	31	98	21	17
	7755 East Marginal Way South, Seattle, WA 98108/206-655-2121						3655 NW 87th Ave, Miami, FL 33178/305-599-2600						One Liberty Place, Philadelphia, PA 19192/215-671-1000				
81	BOISE CASCADE	236	940	310	19	190	CAROLINA POWER & LIGHT	329	113	216	24	995	CILCORP	760	605	660	24
	1111 West Jefferson St, Boise, ID 83702/208-384-6161						Fayetteville St Mall, Raleigh, NC 27602/919-546-6111						300 Hamilton St, Peoria, IL 61602/309-672-5271				
71	BORDEN	126	146	279	10	446	CARTER-WALLACE	726	594	805	12	562	CINCINNATI BELL	593	622	540	22
	277 Park Ave, New York, NY 10172/212-573-4000						1345 Ave of the Americas, New York, NY 10105/212-339-5000						402 Fourth St, Cincinnati, OH 45201/513-397-9900				
10	BORLAND INTERNATIONAL	832	937	877	18	889	CATELLUS DEVELOPMENT	957	864	657	13	388	CINCINNATI FINANCIAL	579	258	374	17
	1600 Green Hills Rd, Scotts Valley, CA 95067/408-438-8400						201 Mission St, San Francisco, CA 94105/415-974-4500						6200 South Gilmore Rd, Fairfield, OH 45014/513-870-2000				
37	BOSTON EDISON	531	370	388	24	158	CATERPILLAR	85	983	138	15	361	CINCINNATI G&E	490	194	315	24
	800 Boylston St, Boston, MA 02199/617-424-2000						100 NE Adams St, Peoria, IL 61629/309-675-1000						139 East Fourth St, Cincinnati, OH 45202/513-381-2000				
51	BOWATER	541	593	415	19	534	CBI INDUSTRIES	467	509	588	11	519	CINTAS	862	695	897	21
	One Parklands Dr, Darien, CT 06820/203-656-7200						800 Jorie Blvd, Oak Brook, IL 60522/708-572-7000						6800 Cintas Blvd, Mason, OH 45040/513-459-1200				
46	BP PRUDHOE BAY	976	382	837	11	344	CBS	294	947	410	20	664	CIPSCO	705	433	537	24
	101 Barclay St, New York, NY 10015/212-815-5093						51 West 52nd St, New York, NY 10019/212-975-4321						607 East Adams St, Springfield, IL 62739/217-523-3600				
58	BRIGGS & STRATTON	626	611	779	15	209	CENTEL	568	322	368	22	462	CIRCUIT CITY STORES	335	510	646	6
	12301 West Wirth St, Wauwatosa, WI 53222/414-259-5333						8725 Higgins Rd, Chicago, IL 60631/312-399-2500						9950 Mayland Dr, Richmond, VA 23233/804-527-4000				
91	BRINKER INTERNATIONAL	820	714	920	14	302	CENTRIOR ENERGY	342	144	137	24	315	CIRCUS CIRCUS	682	342	737	14
	6820 LBJ Freeway, Dallas, TX 75240/214-980-9917						6200 Oak Tree Blvd, Independence, OH 44131/216-447-3100						2880 Las Vegas Blvd South, Las Vegas, NV 89109/702-734-0410				
9	BRISTOL-MYERS SQUIBB	74	5	187	12	717	CENTEX	389	730	505	13	343	CISCO SYSTEMS	911	520	955	18
	345 Park Ave, New York, NY 10154/212-546-4000						3333 Lee Pkwy, Dallas, TX 75219/214-559-6500						1525 O'Brien Dr, Menlo Park, CA 94025/415-326-1941				
06	BROAD	681	580	141	17	530	CENTOCOR	991	964	898	12	142	CITICORP	15	995	1	3
	11601 Wilshire Blvd, Los Angeles, CA 90025/213-312-5000						200 Great Valley Pkwy, Malvern, PA 19355/215-651-6000						399 Park Ave, New York, NY 10043/212-559-1000				
707	BROOKLYN UNION GAS	617	485	530	24	166	CENTRAL & SOUTH WEST	293	106	188	24	369	CITIZENS UTILITIES	791	325	564	24
	One Metrotech Center, Brooklyn, NY 11201/718-403-2000						1616 Woodall Rodgers Fwy, Dallas, TX 75202/214-754-1000						High Ridge Park, Stamford, CT 06905/203-329-8800				
65	BROWN-FORMAN	560	267	635	6	820	CENTRAL BANCSHARES	773	518	260	3	858	CLAYTON HOMES	868	693	831	13
	850 Dixie Hwy, Louisville, KY 40210/502-585-1100						701 South 20th St, Birmingham, AL 35233/205-933-3000						Alcoa Hwy at New Topsis Rd, Knoxville, TN 37901/615-970-7200				
213	BROWNING-FERRIS	281	607	354	21	716	CENTRAL FIDELITY BANKS	741	513	231	3	301	CLOROX	450	503	584	6
	757 North Eldridge, Houston, TX 77079/713-870-8100						1021 East Cary St, Richmond, VA 23219/804-782-4000						1221 Broadway, Oakland, CA 94612/415-271-7000				
514	BRUNO'S	333	498	726	10	950	CENTRAL LA. ELECTRIC	872	606	694	24	850	CML GROUP	846	724	953	8
	800 Lakeshore Pkwy, Birmingham, AL 35211/205-940-9400						2030 Donahue Ferry Rd, Pineville, LA 71360/318-484-7400						524 Main St, Acton, MA 01720/508-264-4155				

ALPHABETICAL LIST OF COMPANIES

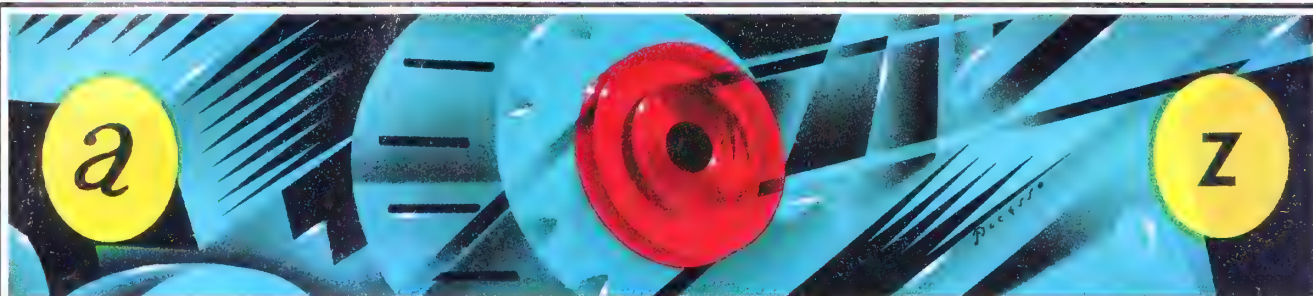


The number to the left of the company's name identifies its rank in market value among The Business Week 1000.
For explanation of other rankings, see page 16+.

MKT RANK	COMPANY	OTHER RANKINGS				IND NO	MKT RANK	COMPANY	OTHER RANKINGS				IND NO	MKT RANK	COMPANY	OTHER RANKINGS				IND NO
		SALES	PROFITS	ASSETS					SALES	PROFITS	ASSETS					SALES	PROFITS	ASSETS		
409	CMS ENERGY 330 Town Center Dr, Dearborn, MI 48126/313-436-9200	301	970	218	24		806	CONSOLIDATED STORES 1105 North Market St, Wilmington, DE 19899/302-478-4896	697	808	895	8		860	CYPRESS SEMICONDUCTOR 3901 North First St, San Jose, CA 95134/408-943-2600	888	686	884	9	
159	CNA FINANCIAL CNA Plaza, Chicago, IL 60685/312-822-5000	75	57	46	17		385	CONTEL CELLULAR 245 Perimeter Center Pkwy, Atlanta, GA 30346/404-804-3400	915	953	532	22		687	CYPRUS MINERALS 9100 East Mineral Circle, Englewood, CO 80112/303-643-5000	451	620	511	16	
330	COASTAL Nine Greenway Plaza, Houston, TX 77046/713-877-1400	96	364	192	11		709	CONTINENTAL BANK 231 South LaSalle St, Chicago, IL 60697/312-828-2345	370	935	74	3		d						
6	COCA-COLA One Coca-Cola Plaza NW, Atlanta, GA 30313/404-676-2121	69	8	169	6		480	CONTINENTAL CORP. 180 Maiden Lane, New York, NY 10038/212-440-3000	174	298	117	17			475	DANA 4500 Dorr St, Toledo, OH 43615/419-535-4500	205	838	331	2
408	COCA-COLA ENTERPRISES One Coca-Cola Plaza NW, Atlanta, GA 30313/404-676-2100	228	944	238	6		747	CONTINENTAL MEDICAL 600 Wilson Lane, Mechanicsburg, PA 17055/717-790-8300	810	783	881	12			837	DANAHER 1250 24th St NW, Washington, DC 20037/202-828-0850	674	839	756	15
112	COLGATE-PALMOLIVE 300 Park Ave, New York, NY 10022/212-310-2000	161	299	326	6		951	CONTROL DATA 8100 34th Ave South, Minneapolis, MN 55440/612-853-8100	487	888	643	18			988	DAUPHIN DEPOSIT 213 Market St, Harrisburg, PA 17101/717-255-2121	877	592	358	3
639	COLUMBIA GAS SYSTEM 20 Montchanin Rd, Wilmington, DE 19807/302-429-5000	338	993	267	24		109	COOPER INDUSTRIES 1001 Fannin, Suite 4000, Houston, TX 77002/713-739-5400	154	109	219	9		172	DAYTON HUDSON 777 Nicollet Mall, Minneapolis, MN 55402/612-370-6948	36	141	177	8	
368	COMCAST 1234 Market St, Philadelphia, PA 19107/215-665-1700	712	960	424	20		355	COOPER TIRE & RUBBER Lima & Western Avenues, Findlay, OH 45840/419-423-1321	618	425	774	2		609	DEAN FOODS 3600 North River Rd, Franklin Park, IL 60131/708-678-1680	388	456	711	10	
827	COMDISCO 6111 North River Rd, Rosemont, IL 60018/708-698-3000	383	417	291	18		776	COORS (ADOLPH) 311 Tenth St, Golden, CO 80401/303-279-6565	422	774	515	6		198	DEERE John Deere Rd, Moline, IL 61265/309-765-8000	128	871	145	15	
401	COMERICA 211 West Fort St, Detroit, MI 48275/313-222-3300	516	241	115	3		323	CORESTATES FINANCIAL Broad & Chestnut Sts, Philadelphia, PA 19107/215-973-3100	350	369	80	3		684	DELL COMPUTER 9505 Arboretum Blvd, Austin, TX 78759/512-338-4400	692	610	839	18	
792	COMMERCE BANCSHARES 1000 Walnut St, Kansas City, MO 64199/816-234-2000	758	516	233	3		111	CORNING Houghton Park, Corning, NY 14831/607-974-9000	274	134	348	15		584	DELMARVA POWER 800 King St, Wilmington, DE 19899/302-429-3011	667	420	463	24	
705	COMMERCE CLEARING 2700 Lake Cook Rd, Riverwoods, IL 60015/708-940-4600	716	711	789	20		187	COSTCO WHOLESALE 10809 120th Ave NE, Kirkland, WA 98033/206-828-8100	172	385	618	8		219	DELTA AIR LINES Hartsfield International Airport, Atlanta, GA 30320/404-715-2600	87	968	196	23	
91	COMMONWEALTH EDISON 72 West Adams St, Chicago, IL 60603/312-294-4321	151	366	87	24		630	COUNTRYWIDE CREDIT 155 North Lake Ave, Pasadena, CA 91109/818-304-8400	898	602	510	17		945	DELTA WOODSIDE 233 North Main St, Greenville, SC 29601/803-232-8301	728	680	844	15	
714	COMMUNICATIONS SATELLITE 950 L'Enfant Plaza SW, Washington, DC 20024/202-863-6000	794	464	605	22		114	CPC INTERNATIONAL International Plaza, Englewood Cliffs, NJ 07632/201-894-4000	153	104	317	10		222	DELUXE 1080 West County Road F, Shoreview, MN 55126/612-483-7111	502	218	671	18	
839	COMMUNITY PSYCHIATRIC 24502 Pacific Park Dr, Laguna Hills, CA 92656/714-831-1166	852	596	806	12		564	CRACKER BARREL Hartmann Dr, Lebanon, TN 37088/615-444-5533	867	744	925	14		532	DESTEC ENERGY 2500 City West Blvd, Houston, TX 77042/713-735-4000	833	414	791	24	
306	COMPAQ COMPUTER 20555 State Hwy 249, Houston, TX 77070/713-370-0670	273	283	418	18		813	CRAIG (JENNY) 445 Marine View Ave, Del Mar, CA 92014/619-259-7000	830	645	981	21		179	DETROIT EDISON 2000 Second Ave, Detroit, MI 48226/313-237-8000	250	68	166	24	
286	COMPUTER ASSOCIATES 711 Stewart Ave, Garden City, NY 11530/516-227-3300	506	225	458	18		702	CRANE 757 Third Ave, New York, NY 10017/212-415-7300	537	601	776	15		921	DEXTER One Elm St, Windsor Locks, CT 06096/203-627-9051	631	884	740	4	
549	COMPUTER SCIENCES 2100 East Grand Ave, El Segundo, CA 90245/213-615-0311	416	484	614	18		644	CRAWFORD 5620 Glenridge Dr NE, Atlanta, GA 30342/404-256-0830	788	660	916	17		920	DIAGNOSTEK 4500 Alexander Blvd NE, Albuquerque, NM 87107/505-345-8080	899	848	945	8	
110	CONAGRA One ConAgra Dr, Omaha, NE 68102/402-978-4000	24	124	159	10		594	CRAY RESEARCH 655-A Lone Oak Dr, Eagan, MN 55121/612-452-6650	659	320	674	18		376	DIAL 1850 North Central Ave, Phoenix, AZ 85077/602-207-4000	253	304	281	5	
556	CONNER PERIPHERALS 3081 Zanker Rd, San Jose, CA 95134/408-456-4500	472	379	616	18		718	CRESTAR FINANCIAL 919 East Main St, Richmond, VA 23219/804-782-5000	557	688	142	3		841	DIAMOND SHAMROCK 9830 Colonnade Blvd, San Antonio, TX 78230/512-641-6800	339	663	636	11	
631	CONSECO 11825 North Pennsylvania St, Carmel, IN 46032/317-573-6100	517	307	146	17		586	CRITICAL CARE AMERICA 50 Washington St, Westborough, MA 01581/508-836-3610	917	840	938	12		998	DIBRELL BROTHERS 512 Bridge St, Danville, VA 24543/804-792-7511	601	769	794	6	
132	CONSOLIDATED EDISON Four Irving Place, New York, NY 10003/212-460-4600	163	69	153	24		647	CROMPTON & KNOWLES One Station Place, Stamford, CT 06902/203-353-5400	827	674	909	4		736	DIEBOLD 818 Mulberry Rd SE, Canton, OH 44707/216-489-4000	803	675	814	18	
830	CONS. FREIGHTWAYS 3240 Hillview Ave, Palo Alto, CA 94304/415-494-2900	225	918	459	23		293	CROWN CORK & SEAL 9300 Ashton Rd, Philadelphia, PA 19136/215-698-5100	241	289	398	7		94	DIGITAL EQUIPMENT 146 Main St, Maynard, MA 01754/508-493-5111	42	994	139	18	
250	CONS. NATURAL GAS 625 Liberty Ave, Pittsburgh, PA 15227/412-227-1000	336	228	313	24		125	CSX 901 East Cary St, Richmond, VA 23219/804-782-1400	111	938	127	23		174	DILLARD DEPT. STORES 900 West Capital Ave, Little Rock, AR 72203/501-376-5200	230	196	366	8	
415	CONSOLIDATED PAPERS 231 First Ave North, Wisconsin Rapids, WI 54495/715-422-3111	650	386	604	19		490	CUC INTERNATIONAL 707 Summer St, Stamford, CT 06901/203-324-9261	795	742	922	18		26	DISNEY (WALT) 500 South Buena Vista St, Burbank, CA 91521/818-560-1000	142	51	168	14	
225	CONSOLIDATED RAIL 1836 Six Penn Center, Philadelphia, PA 19103/215-977-4000	276	965	222	23		640	CUMMINS ENGINE 500 Jackson St, Columbus, IN 47202/812-377-5000	259	928	506	2								

RANK	COMPANY	OTHER RANKINGS			IND NO	RANK	COMPANY	OTHER RANKINGS			IND NO	RANK	COMPANY	OTHER RANKINGS			IND NO
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
71	DOLE FOOD 31255 Oak Crest Dr, West Lake Village, CA 91361/818-879-6600	277	280	433	10	733	ENSERCH 300 South St, Paul St, Dallas, TX 75201/214-651-8700	310	811	384	24	744	FIRST SECURITY 79 South Main St, Salt Lake City, UT 84110/801-350-5258	714	517	225	3
47	DOLLAR GENERAL 104 Woodmont Blvd, Nashville, TN 37205/615-386-4000	709	820	915	8	157	ENTERGY 225 Baronne St, New Orleans, LA 70112/504-529-5262	227	75	113	24	762	FIRST TENNESSEE NATL. 165 Madison Ave, Memphis, TN 38103/901-523-4444	696	497	213	3
12	DOMINION BANKSHARES 213 South Jefferson St, Roanoke, VA 24011/703-563-7000	605	805	181	3	502	EQUIFAX 1600 Peachtree St NW, Atlanta, GA 30309/404-885-8000	592	545	763	17	186	FIRST UNION One First Union Center, Charlotte, NC 28288/704-374-6565	219	131	33	3
44	DOMINION RESOURCES 901 East Byrd St, Richmond, VA 23219/804-775-5700	243	83	154	24	735	EQUITABLE RESOURCES 420 Blvd of the Allies, Pittsburgh, PA 15219/412-261-3000	721	492	608	24	697	FIRST VIRGINIA BANKS 6400 Arlington Blvd, Falls Church, VA 22042/703-241-4000	763	472	261	3
99	DONNELLEY (R.R.) & SONS 2223 South Martin Luther King Jr Dr, Chicago, IL 60616/312-326-8000	237	199	376	21	259	ETHYL 330 South Fourth St, Richmond, VA 23219/804-788-5000	340	195	212	4	436	FIRSTAR 777 East Wisconsin Ave, Milwaukee, WI 53202/414-765-4321	547	278	134	3
32	DOVER 280 Park Ave, New York, NY 10017/212-922-1640	384	288	613	15	769	EXABYTE 1685 38th St, Boulder, CO 80301/303-442-4333	916	703	972	18	974	FISERV 2152 South 114th St, Milwaukee, WI 53227/414-546-5000	897	819	754	18
40	DOW CHEMICAL 2030 Willard H. Dow Center, Midland, MI 48674/517-636-1000	30	34	70	4	1	EXXON 225 East Carpenter Fwy, Irving, TX 75062/214-444-1000	2	1	17	11	910	FISHER-PRICE 636 Girard Ave, East Aurora, NY 14052/716-687-3000	744	825	842	14
35	DOW JONES 200 Liberty St, New York, NY 10281/212-416-2000	436	460	440	20	<i>f</i>						221	FLEET/HORSTAR 50 Kennedy Plaza, Providence, RI 02903/401-278-5800	215	359	34	3
22	DPL 1065 Woodman Dr, Dayton, OH 45432/513-224-6000	615	284	393	24							659	FLEETWOOD ENTERPRISES 3125 Myers St, Riverside, CA 92523/714-351-3500	493	642	698	14
73	DQE 301 Grant St, Pittsburgh, PA 15279/412-393-6000	563	263	345	24							561	FLEMING 6301 Waterford Blvd, Oklahoma City, OK 73118/405-840-7200	53	458	394	10
79	DRESSER INDUSTRIES 1600 Pacific Ave, Dallas, TX 75201/214-740-6000	202	274	382	11	603	FAMILY DOLLAR STORES 10401 Old Monroe Rd, Matthews, NC 28105/704-847-6961	606	609	858	8	411	FLIGHTSAFETY INTL. Marine Air Terminal, La Guardia Airport, Flushing, NY 11371/718-565-4100	904	457	769	23
177	DREYFUS 200 Park Ave, New York, NY 10166/212-922-6000	894	475	725	17	261	FEDERAL EXPRESS 2005 Corporate Ave, Memphis, TN 38132/901-369-3600	121	912	269	23	335	FLORIDA PROGRESS One Progress Plaza, St. Petersburg, FL 33701/813-824-6400	398	209	297	24
12	DUPONT 1007 Market St, Wilmington, DE 19898/302-774-1000	12	16	44	4	97	FEDERAL HOME LOAN 8200 Jones Branch Dr, McLean, VA 22102/703-903-2000	222	70	32	17	929	FLOWERS INDUSTRIES 200 U. S. Hwy 19 South, Thomasville, GA 31799/912-226-9110	673	773	848	10
107	DUKE POWER 422 South Church St, Charlotte, NC 28242/704-373-4011	240	64	165	24	32	FEDERAL NATL. MORTGAGE 3900 Wisconsin Ave, Washington, DC 20016/202-752-7000	48	15	6	17	220	FLUOR 3333 Michelson Dr, Irvine, CA 92730/714-975-5000	145	242	445	21
65	DUN & BRADSTREET 299 Park Ave, New York, NY 10171/212-593-6800	198	84	308	20	543	FEDERAL PAPER BOARD 75 Chestnut Ridge Rd, Montvale, NJ 07645/201-391-1776	508	409	442	7	427	FMC 200 East Randolph Dr, Chicago, IL 60601/312-861-6000	238	224	409	15
241	DURACELL INTL. Berkshire Industrial Park, Bethel, CT 06801/203-796-4000	474	319	460	15	787	FEDERAL SIGNAL 1415 West 22nd St, Oak Brook, IL 60521/708-954-2000	824	712	896	15	99	FOOD LION 2110 Executive Dr, Salisbury, NC 28144/704-633-8250	149	197	508	10
508	DUTY FREE INTL. 19 Catoona St, Ridgefield, CT 06877/203-431-6057	939	775	949	8	728	FERRO 1000 Lakeside Ave, Cleveland, OH 44114/216-641-8580	602	865	773	4	31	FORD MOTOR The American Rd, Dearborn, MI 48121/313-322-3000	3	999	3	2
574	E-SYSTEMS 6250 LBJ Freeway, Dallas, TX 75240/214-661-1000	408	328	681	9	985	FHP INTERNATIONAL 9900 Talbert Ave, Fountain Valley, CA 92708/714-963-7233	510	692	784	12	521	FOREST LABORATORIES 150 East 58th St, New York, NY 10155/212-421-7850	920	584	890	12
923	EASTERN ENTERPRISES Nine Riverside Rd, Weston, MA 02193/617-447-2300	621	731	648	24	281	FIFTH THIRD BANCORP 38 Fountain Square Plaza, Cincinnati, OH 45263/513-579-5300	643	271	199	3	614	FOSTER WHEELER Perryville Corporate Park, Clinton, NJ 08809/908-730-4000	407	614	560	21
45	EASTMAN KODAK 343 State St, Rochester, NY 14650/716-724-4000	28	827	69	14	865	FILENE'S BASEMENT 40 Walnut St, Wellesley, MA 02181/617-348-7000	831	878	951	8	882	FOUNDATION HEALTH 3400 Data Dr, Rancho Cordova, CA 95670/916-631-5000	609	676	928	12
321	EATON 1111 Superior Ave NE, Cleveland, OH 44114/216-523-5000	265	504	389	2	553	FINA 8350 North Central Expwy, Dallas, TX 75206/214-750-2400	268	626	406	11	139	FPL GROUP 11770 U. S. Hwy One, North Palm Beach, FL 33408/407-694-6300	179	102	150	24
543	ECHLIN 100 Double Beach Rd, Branford, CT 06405/203-481-5751	448	612	640	2	761	FINGERHUT 4400 Baker Rd, Minnetonka, MN 55343/612-932-3100	512	546	755	8	390	FRANKLIN RESOURCES 777 Mariners Island Blvd, San Mateo, CA 94404/415-312-2000	874	339	788	17
598	ECOLAB 370 Wabasha St, St. Paul, MN 55102/612-293-2233	636	537	639	6	667	FIRST ALABAMA 417 No. 20th St, Birmingham, AL 35203/205-326-7100	732	430	234	3	245	FREEMORE-MCMORAN 1615 Paydros St, New Orleans, LA 70112/504-582-4000	478	362	360	4
715	EDISON BROTHERS STORES 501 North Broadway, St. Louis, MO 63102/314-331-6000	521	508	722	8	990	FIRST AMERICAN First American Center, Nashville, TN 37237/615-748-2000	765	829	248	3	194	FREEMORE-MCMORAN C&G 1615 Paydros St, New Orleans, LA 70112/504-582-4000	822	346	659	16
567	EDWARDS (A.G.) One North Jefferson, St. Louis, MO 63103/314-289-3000	664	383	602	17	372	FIRST BANK SYSTEM 1200 First Bank Place East, Minneapolis, MN 55480/612-370-4646	426	211	93	3	308	FRUIT OF THE LOOM 233 South Wacker Dr, Chicago, IL 60606/312-876-7000	492	407	480	6
493	E6&G 45 William St, Wellesley, MA 02181/617-237-5100	328	415	766	21	892	FIRST BRANDS 83 Wooster Heights Rd, Danbury, CT 06813/203-731-2300	620	644	734	15	911	FULLER (H.B.) 2400 Energy Park Dr, St. Paul, MN 55108/612-645-3401	663	741	826	4
52	EMERSON ELECTRIC 8000 West Florissant Ave, St. Louis, MO 63136/314-553-2000	125	56	242	9	377	FIRST CHICAGO One First National Plaza, Chicago, IL 60676/312-732-4000	193	315	28	3	636	FUND AMERICAN Main St, Norwich, VT 05088/802-649-3633	913	217	408	17
425	ENGELHARD 101 Wood Ave, Iselin, NJ 08830/908-205-6000	359	395	628	4	692	FIRST EMPIRE STATE One M&T Plaza, Buffalo, NY 14240/716-842-5445	665	476	195	3	<i>g</i>					
683	ENQUIRER/STAR GROUP 600 Southeast Coast Ave, Lantana, FL 33462/407-586-1111	900	868	742	20	341	FIRST FIDELITY 1009 Lenox Dr, Lawrenceville, NJ 08648/609-895-6800	316	182	60	3						
217	ENRON 1400 Smith St, Houston, TX 77002/713-853-6161	49	169	178	24	451	FIRST FINANCIAL MGMT. Three Corporate Square, Atlanta, GA 30329/404-321-0120	495	394	278	17						
503	ENRON OIL & GAS 1400 Smith St, Houston, TX 77002/713-853-6161	855	541	593	11	691	FIRST HAWAIIAN 165 South King St, Honolulu, HI 96813/808-525-7000	769	413	244	3	104	GANNETT 1100 Wilson Blvd, Arlington, VA 22234/703-284-6000	264	140	355	20
						202	FIRST INTERSTATE 633 West Fifth St, Los Angeles, CA 90071/213-614-3001	181	974	29	3	108	GAP (THE) One Harrison, San Francisco, CA 94105/415-952-4400	348	177	661	8
						595	FIRST OF AMERICA BANK 108 East Michigan Ave, Kalamazoo, MI 49007/616-376-9000	509	276	99	3	924	GATX 120 South Riverside Plaza, Chicago, IL 60606/312-621-6200	623	408	365	23

ALPHABETICAL LIST OF COMPANIES



The number to the left of the company's name identifies its rank in market value among *The Business Week 1000*.
For explanation of other rankings, see page 211.

MKT RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT RANK	COMPANY	OTHER RANKINGS			IND. NO.	MKT RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
234	GEICO 5260 Western Ave, Washington, DC 20815/301-986-3000	390	206	338	17	275	GENERAL PUBLIC UTILS. 100 Interpace Pkwy, Parsippany, NJ 07054/201-263-6500	266	133	217	24	680	GEORGIA GULF 400 Perimeter Center Terrace, Atlanta, GA 30346/404-395-4500	672	507	869	4
243	GENENTECH 460 Pt San Bruno, South San Francisco, CA 94080/415-266-1000	825	608	634	12	86	GENERAL RE 695 East Main, Stamford, CT 06904/203-328-5000	279	53	131	17	138	GEORGIA-PACIFIC 133 Peachtree St NE, Atlanta, GA 30303/404-521-4000	71	939	162	19
437	GENERAL CINEMA 27 Baylston St, Chestnut Hill, MA 02167/617-232-8200	252	971	254	5	585	GENERAL SIGNAL One High Ridge Park, Stamford, CT 06904/203-357-8800	466	495	653	15	298	GERBER PRODUCTS 445 State St, Fremont, MI 49413/616-928-2000	558	336	724	10
303	GENERAL DYNAMICS 3190 Fairview Park Dr, Falls Church, VA 22042/703-876-3000	107	115	255	1	845	GENETICS INSTITUTE 87 Cambridge Park Dr, Cambridge, MA 02140/617-876-1170	978	895	952	12	483	GIANT FOOD 6300 Sheriff Rd, Landover, MD 20785/301-341-4100	262	344	629	10
3	GENERAL ELECTRIC 3135 Easton Turnpike, Fairfield, CT 06431/203-373-2211	5	2	4	5	766	GENSIA PHARMACEUTICALS 11025 Roselle St, San Diego, CA 92121/619-546-8300	998	907	998	12	989	GIBSON GREETINGS 2100 Section Rd, Cincinnati, OH 45237/513-841-6600	793	628	816	14
55	GENERAL MILLS One General Mills Blvd, Minneapolis, MN 55426/612-540-2311	123	90	328	10	205	GENUINE PARTS 2999 Circle 75 Pkwy, Atlanta, GA 30339/404-953-1700	257	191	594	21	58	GILLETTE Prudential Tower Bldg, Boston, MA 02199/617-421-7000	197	101	361	6
19	GENERAL MOTORS 3044 West Grand Blvd, Detroit, MI 48202/313-556-5000	1	1000	2	2	626	GENZYME One Kendall Square, Cambridge, MA 02139/617-252-7500	970	880	926	12	537	GLATFELTER (P.H.) 228 South Main St, Spring Grove, PA 17362/717-225-4711	774	437	787	19

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MKT RANK	COMPANY	OTHER RANKINGS			IND NO
		SALES	PROFITS	ASSETS	
311	GOLDEN WEST FINANCIAL 1901 Harrison St, Oakland, CA 94612/510-446-8000	379	172	71	17
542	GOODRICH (B.F.) 3925 Embassy Pkwy, Akron, OH 44333/216-374-2000	351	942	444	4
185	GOODYEAR TIRE & RUBBER 1144 East Market St, Akron, OH 44316/216-796-2121	77	445	205	2
914	GOULDS PUMPS 240 Fall St, Seneca Falls, NY 13148/315-568-2811	776	709	872	15
203	GRACE (W.R.) One Town Center Rd, Boca Raton, FL 33486/407-362-2000	162	185	265	4
273	GRAINGER (W.W.) 5500 West Howard St, Skokie, IL 60077/708-982-9000	397	290	642	21
547	GREAT A&P TEA Two Paragon Dr, Montvale, NJ 07645/201-573-9700	67	396	380	10
207	GREAT LAKES CHEMICAL PO Box 2200, West Lafayette, IN 47906/317-497-6100	535	237	558	4
331	GREAT WESTERN 8484 Wilshire Blvd, Beverly Hills, CA 90211/213-852-3411	235	143	40	17
940	GREEN TREE ACCEPTANCE 345 St. Peter St, St. Paul, MN 55102/612-293-3400	928	532	714	17
981	GREIF BROS. 621 Pennsylvania Ave, Delaware, OH 43015/614-363-1271	834	788	905	7
344	GRUMMAN 1111 Stewart Ave, Bethpage, NY 11714/516-575-0574	229	352	441	1
13	GTE One Stamford Forum, Stamford, CT 06904/203-965-2000	26	12	38	22
513	GULF STATES UTILITIES 350 Pine St, Beaumont, TX 77701/409-838-6631	442	305	227	24
b					
MKT RANK	COMPANY	OTHER RANKINGS			IND NO
		SALES	PROFITS	ASSETS	
254	HALLIBURTON 500 North Akard St, Dallas, TX 75201/214-978-2600	131	751	296	11
956	HANDLEMAN 500 Kirts Blvd, Troy, MI 48084/313-362-4400	640	699	758	21
880	HANNA (M.A.) 1301 East Ninth St, Cleveland, OH 44114/216-589-4000	577	901	688	4
602	HANNAFORD BROTHERS 145 Pleasant Hill Rd, Scarborough, ME 04074/207-883-2911	402	613	765	10
729	HANOVER INSURANCE 100 North Pkwy, Worcester, MA 01605/508-853-7200	429	567	369	17
690	HARLAND (JOHN H.) 2939 Miller Rd, Decatur, GA 30035/404-981-9460	858	560	893	18
606	HARLEY-DAVIDSON 3700 West Juneau Ave, Milwaukee, WI 53208/414-342-4680	630	665	840	14
879	HARNISCHFEGER 13400 Bishops Way, Brookfield, WI 53005/414-671-4400	482	506	581	15
538	HARRIS 1025 West NASA Blvd, Melbourne, FL 32919/407-727-9100	296	391	446	9
660	HARSCO 350 Popular Church Rd, Camp Hill, PA 17011/717-763-7064	418	434	684	15
633	HARTFORD STEAM BOILER One State St, Hartford, CT 06102/203-722-1866	748	446	709	17
359	HASBRO 1027 Newport Ave, Pawtucket, RI 02862/401-431-8697	391	412	516	14
685	HAWAIIAN ELECTRIC 900 Richards St, Honolulu, HI 96813/808-543-5662	595	505	346	24
962	HEALTH CARE PROPERTY 10990 Wilshire Blvd, Los Angeles, CA 90024/213-473-1990	981	756	845	12
719	HEALTHCARE COMPARE 3200 Highland Ave, Downers Grove, IL 60515/708-241-7900	983	843	994	17
720	HEALTHSOUTH REHAB. Two Perimeter Park South, Birmingham, AL 35243/205-967-7116	923	786	838	12
466	HEALTHTRUST 4525 Harding Rd, Nashville, TN 37205/615-383-4444	393	772	435	12
926	HECHINGER 1616 McCormick Dr, Landover, MD 20785/301-341-1000	469	758	699	8
862	HEILIG-MEYERS 2235 Staples Mill Rd, Richmond, VA 23230/804-359-9171	812	771	801	6
73	HEINZ (H.J.) 600 Grant St, Pittsburgh, PA 15219/412-456-5700	146	54	257	10
932	HELMERICH & PAYNE 1579 East 21st St, Tulsa, OK 74114/918-742-5531	936	844	800	11
934	HENLEY GROUP Liberty Lane, Hampton, NH 03842/603-926-5911	446	988	519	9
327	HERCULES 1313 North Market St, Wilmington, DE 19894/302-594-5000	302	367	371	4
206	HERSHEY FOODS 100 Crystal A Dr, Hershey, PA 17033/717-534-4000	304	184	453	10
28	HEWLETT-PACKARD 3000 Hanover St, Palo Alto, CA 94304/415-857-1501	40	39	135	18
277	HILLENBRAND INDUSTRIES Hwy 46, Batesville, IN 47006/812-934-7000	562	393	575	15

should sleep on.

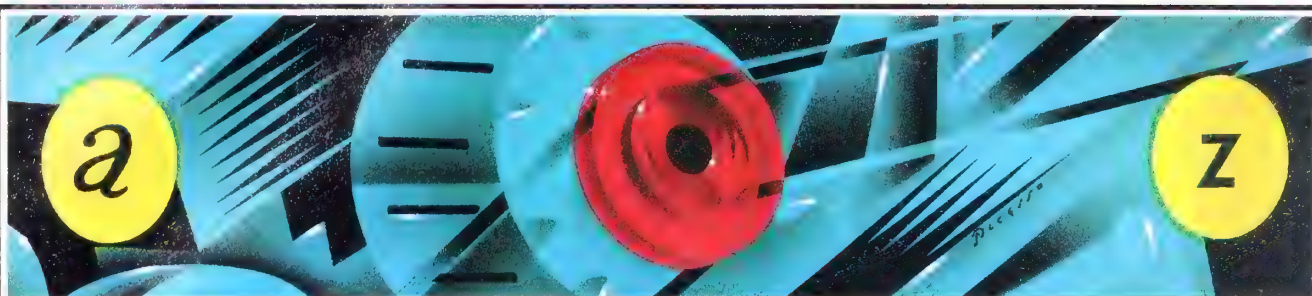


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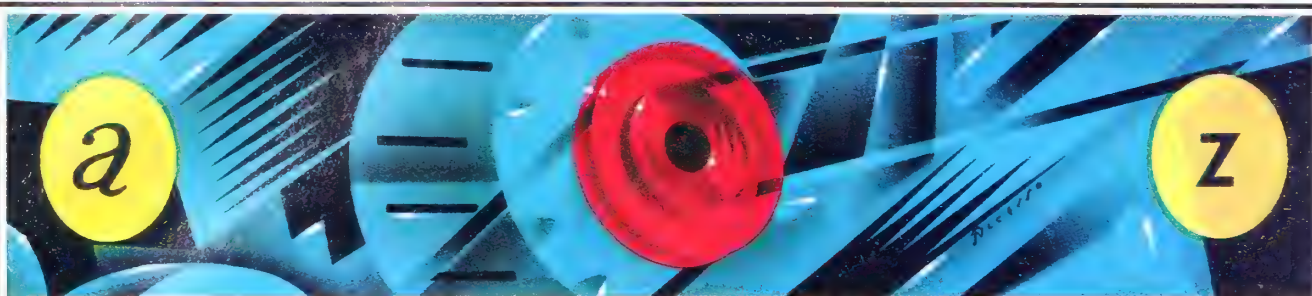
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The number to the left of the company's name identifies its rank in market value among The Business Week 1000.
For explanation of other rankings, see page 164.

MKT RANK	COMPANY	OTHER RANKINGS			IND NO	MKT RANK	COMPANY	OTHER RANKINGS			IND NO	MKT RANK	COMPANY	OTHER RANKINGS			IND NO		
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS			
363	HILTON HOTELS 9336 Civic Center Dr, Beverly Hills, CA 90209/213-278-4321	589	402	474	14	777	IMMUNEX 51 University St, Seattle, WA 98101/206-587-0430	992	875	934	12	11	JOHNSON & JOHNSON One Johnson & Johnson Plaza, New Brunswick, NJ 08933/908-524-0400	58	14	163	12		
896	HOLNAM 6211 Ann Arbor Rd, Dundee, MI 48131/313-529-2411	624	946	563	13	829	INB FINANCIAL One Indiana Square, Indianapolis, IN 46266/317-266-6000	738	573	243	3	455	JOHNSON CONTROLS 5757 North Green Bay Ave, Milwaukee, WI 53209/414-228-1200	201	354	407	9		
944	HOME BENEFICIAL 3901 West Broad St, Richmond, VA 23230/804-358-8431	937	576	645	17	957	INFORMATION RESOURCES 150 North Clinton St, Chicago, IL 60661/312-726-1221	933	837	961	21	782	JONES APPAREL GROUP 250 Rittenhouse Circle, Bristol, PA 19007/215-785-4000	876	715	979	6		
48	HOME DEPOT 2727 Paces Ferry Rd, Atlanta, GA 30339/404-433-8211	180	164	437	8	239	INGERSOLL-RAND 200 Chestnut Steel, Woodcliff Lake, NJ 07675/201-573-0123	251	246	392	15	492	JOSTENS 5501 Norman Center Dr, Minneapolis, MN 55437/612-830-3300	651	487	818	15		
763	HOME SHOPPING NETWORK 12000 25th Court North, St. Petersburg, FL 33716/813-572-8585	598	887	802	8	811	INLAND STEEL INDUSTRIES 30 West Monroe St, Chicago, IL 60603/312-346-0300	260	973	423	16	770	JWP 2975 Westchester Ave, Purchase, NY 10577/914-935-4000	248	514	461	21		
454	HOMESTAKE MINING 650 California St, San Francisco, CA 94108/415-981-8150	844	949	700	16	682	INTEGRA FINANCIAL Four PPG Place, Pittsburgh, PA 15222/412-644-7669	687	470	198	3	k	740	KAISER ALUMINUM 5847 San Felipe, Houston, TX 77057/713-267-3777	405	332	493	16	
835	HON INDUSTRIES 414 East Third St, Muscatine, IA 52761/319-264-7400	754	697	918	18	49	INTEL 3065 Bowers Ave, Santa Clara, CA 95051/408-765-8080	196	40	250	9		524	KANSAS CITY POWER 1330 Baltimore Ave, Kansas City, MO 64105/816-556-2200	679	340	427	24	
156	HONEYWELL 2701 Fourth Ave, Minneapolis, MN 55408/612-870-5200	152	127	306	9	703	INTELLIGENT ELECTRONICS 411 Eagleview Blvd, Exton, PA 19341/215-458-5500	387	641	764	18		722	KANSAS CITY SOUTHERN 114 West 11th St, Kansas City, MO 64105/816-556-0303	752	591	667	23	
491	HORMEL (GEO. A.) 501 NE 16th Ave, Austin, MN 55912/507-437-5611	318	406	721	10	672	INTERGRAPH One Madison Industrial Park, Huntsville, AL 35894/205-730-2000	566	465	691	18		605	KANSAS GAS & ELECTRIC 120 East First, Wichita, KS 67202/316-261-6611	757	547	451	24	
354	HOUSEHOLD INTL. 2700 Sanders Rd, Prospect Heights, IL 60070/708-564-5000	203	248	61	5	895	INTL. DAIRY QUEEN 5701 Green Valley Dr, Bloomington, MN 55437/612-830-0200	889	739	965	14		645	KANSAS POWER & LIGHT 818 Kansas Ave, Topeka, KS 66612/913-296-6300	572	459	486	24	
148	HOUSTON INDUSTRIES 4300 Post Oak Pkwy, Houston, TX 77027/713-629-3000	214	95	136	24	197	INTL. FLAVORS 521 West 57th St, New York, NY 10019/212-765-5500	612	227	641	6		877	KAUFMAN & BROAD HOME 10877 Wilshire Blvd, Los Angeles, CA 90024/213-443-8000	552	752	609	13	
424	HUBBELL 584 Derby-Milford Rd, Orange, CT 06477/203-799-4100	694	388	775	9	444	INTL. GAME TECHNOLOGY 520 South Rock Blvd, Reno, NV 89502/702-688-0100	908	678	889	15		47	KELLOGG One Kellogg Square, Battle Creek, MI 49016/616-961-2000	165	59	344	10	
	HUMANA 500 West Main St, Louisville, KY 40201/502-580-1000	159	120	318	12	949	INTL. MULTIFOODS 33 South Sixth St, Minneapolis, MN 55402/612-340-3300	376	640	701	10		589	KELLY SERVICES 999 West Big Beaver Rd, Troy, MI 48084/313-362-4444	507	643	832	21	
794	HUNT (J.B.) 615 J. B. Hunt Corp. Dr, Lowell, AR 72745/501-820-0000	701	729	822	23	75	INTERNATIONAL PAPER Two Manhattanville Rd, Purchase, NY 10577/914-397-1500	56	107	109	19		442	KEMPER Route 22, Long Grove, IL 60049/708-540-2000	289	200	118	17	
533	HUNTINGTON BANCSHARES 41 South High St, Columbus, OH 43287/614-463-3623	554	314	133	3	525	INTL. SPECIALTY PRODUCTS 818 Washington St, Wilmington, DE 19801/914-397-1500	790	618	676	4		413	KERR-McGEE Kerr-McGee Center, Oklahoma City, OK 73125/405-270-1313	272	347	375	11	
i						366	INTERPUBLIC GROUP 1271 Ave of the Americas, New York, NY 10020/212-399-8000	452	371	455	21	349	KEYCORP 30 South Pearl St, Albany, NY 12207/518-486-8000	372	213	77	3		
						822	IOWA-ILLINOIS G&E 206 East Second St, Davenport, IA 52801/319-326-7111	800	543	571	24	708	KEYSTONE INTERNATIONAL 9600 West Gulf Bank Rd, Houston, TX 77040/713-466-1176	796	780	864	15		
						546	IPALCO ENTERPRISES 25 Monument Circle, Indianapolis, IN 46204/317-261-8261	735	338	531	24	960	KIMBALL INTERNATIONAL 1600 Royal St, Jasper, IN 47549/812-482-1600	780	723	873	6		
	8	IBM Old Orchard Rd, Armonk, NY 10504/914-765-1900	4	989	14	18	874	ITEL Two North Riverside Plaza, Chicago, IL 60606/312-902-1515	435	929	385	5	85	KIMBERLY-CLARK 545 East Carpenter Fwy, Irving, TX 75062/214-830-1200	139	85	272	19	
	750	IBP IBP Ave, Dakota City, NE 68731/402-494-2061	82	874	596	10	93	ITT 1330 Ave of the Americas, New York, NY 10019/212-258-1000	25	41	27	5	617	KING WORLD 12400 Wilshire Blvd, West Los Angeles, CA 90025/213-826-1108	804	374	798	14	
	673	IDAHO POWER 1221 West Idaho St, Boise, ID 83707/208-383-2200	815	526	535	24	351	IVAX 8800 NW 36th St, Miami, FL 33178/305-590-2200	952	855	852	12	61	KMART 3100 West Big Beaver Rd, Troy, MI 48084/313-643-1000	14	38	102	8	
	814	IES INDUSTRIES 201 First St St, Cedar Rapids, IA 52401/319-398-4411	729	581	597	24	j	746	JACOBS ENGINEERING 251 South Lake Ave, Pasadena, CA 91101/818-449-2171	607	795	921	21	247	KNIGHT-RIDDER One Herald Plaza, Miami, FL 33132/305-376-3800	380	282	450	20
	612	ILLINOIS CENTRAL 233 North Michigan Ave, Chicago, IL 60601/312-819-7500	781	486	652	23		423	JAMES RIVER 120 Tredegar St, Richmond, VA 23219/804-644-5411	208	429	274	19	474	KROGER 1014 Vine St, Cincinnati, OH 45202/513-762-4000	21	349	336	10
	417	ILLINOIS POWER 500 South 27th St, Decatur, IL 62525/217-424-6600	500	329	284	24		398	JEFFERSON-PILOT 100 North Greene St, Greensboro, NC 27401/919-491-3000	570	223	302	17	658	KU ENERGY One Quality St, Lexington, KY 40507/606-255-2100	762	404	603	24
	215	ILLINOIS TOOL WORKS 3600 West Lake Ave, Glenview, IL 60625/708-724-7500	334	220	466	15													
512	IMC FERTILIZER GROUP 2100 Sanders Rd, Northbrook, IL 60062/708-272-9200	590	389	523	4														
300	IMCERA GROUP 2315 Sanders Rd, Northbrook, IL 60062/708-564-8600	457	316	502	12														

RANK	COMPANY	OTHER RANKINGS			IND. NO.	RANK	COMPANY	OTHER RANKINGS			IND. NO.	RANK	COMPANY	OTHER RANKINGS			IND. NO.
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
1																	
979	LA-Z-BOY CHAIR	753	766	888	6	345	LUBRIZOL	499	302	658	4	883	MCN	542	672	578	24
	1284 North Telegraph Rd, Monroe, MI 48161/313-242-1444						29400 Lakeland Blvd, Wickliffe, OH 44092/216-943-1200						500 Griswold St, Detroit, MI 48226/313-256-5500				
693	LAFARGE	479	922	529	13	400	LYONDELL PETROCHEMICAL	168	181	587	4	997	MDU RESOURCES GROUP	860	654	692	24
	11130 Sunrise Valley Dr, Reston, VA 22091/703-264-3600						1221 McKinney St, Houston, TX 77010/713-652-7200						400 North Fourth St, Bismarck, ND 58501/701-222-7900				
976	LANCASTER COLONY	799	765	917	15							356	MEAD	207	438	343	19
	37 West Broad St, Columbus, OH 43215/614-224-7141												Ten West Second St, Dayton, OH 45463/513-222-6323				
732	LANCE	828	658	913	10							192	MEDCO CONTAINMENT	484	399	669	12
	8600 South Blvd, Charlotte, NC 28273/704-554-1421												100 Summit Ave, Montvale, NJ 07645/201-358-5400				
915	LANDS' END	740	777	924	8							905	MEDIA GENERAL	766	926	747	20
	Lands' End Lane, Dodgeville, WI 53595/608-935-9341												333 East Grace St, Richmond, VA 23219/804-649-6000				
913	LAWTER INTERNATIONAL	953	755	967	4	941	MAGMA POWER	974	687	891	24	508	MEDICAL CARE INTL.	895	648	819	12
	990 Skokie Blvd, Northbrook, IL 60062/708-498-4700						11770 Bernardo Place Court, San Diego, CA 92128/619-487-9412						5080 Spectrum Dr, Dallas, TX 75248/214-851-2600				
831	LEE ENTERPRISES	869	728	841	20	646	MANOR CARE	655	662	697	12	958	MEDIMMUNE	997	873	997	12
	215 North Main St, Davenport, IA 52801/319-383-2100						10750 Columbia Pike, Silver Spring, MD 20901/301-593-9600						35 West Watkins Mill Rd, Gaithersburg, MD 20878/301-417-0770				
632	LEGENT	931	668	914	18	486	MANUFACTURERS NATL.	573	308	121	3	855	MEDITRUST	969	656	703	12
	8615 Westwood Center Dr, Vienna, VA 22182/703-734-9494						100 Renaissance Center, Detroit, MI 48243/313-222-4000						128 Technology Center, Wallingham, MA 02154/617-736-1500				
742	LEGGETT & PLATT	596	637	782	6	405	MAPCO	313	295	545	11	175	MEDTRONIC	583	238	665	12
	One Leggett Rd, Carthage, MO 64836/417-358-8131						1800 South Baltimore Ave, Tulsa, OK 74119/918-581-1800						7000 Central Ave NE, Minneapolis, MN 55432/612-574-4000				
965	LENNAR	878	799	719	13	66	MARION MERRELL DOW	307	63	417	12	375	MELLON BANK	286	150	63	3
	700 Northwest 107th Ave, Miami, FL 33172/305-559-4000						9300 Ward Pkwy, Kansas City, MO 64114/816-966-4000						One Mellon Bank Center, Pittsburgh, PA 15258/412-234-5000				
885	LEUCADIA NATIONAL	676	759	321	17	916	MARK IV INDUSTRIES	584	736	686	15	151	MELVILLE	90	123	329	8
	315 Park Ave South, New York, NY 10010/212-460-1900						501 Audubon Pkwy, Amherst, NY 14228/716-689-4972						One Threll Rd, Rye, NY 10580/914-925-4000				
629	LG&E ENERGY	707	381	496	24	699	MARQUETTE ELECTRONICS	926	846	966	12	726	MENTOR GRAPHICS	847	925	853	18
	220 West Main St, Louisville, KY 40202/502-627-2000						8200 West Tower Ave, Milwaukee, WI 53223/414-355-5000						8005 SW Boeckman Rd, Wilsonville, OR 97070/503-685-7000				
938	LIBERTY NATIONAL	849	657	324	3	435	MARRIOTT	115	410	230	14	789	MERCANTILE BANCORP.	691	478	210	3
	416 West Jefferson St, Louisville, KY 40232/502-566-2704						10400 Fernwood Rd, Bethesda, MD 20817/301-897-6000						721 Locust St, St. Louis, MO 63101/314-425-2525				
23	LILLY (ELI)	169	19	208	12	147	MARSH & MCLENNAN	315	137	449	17	721	MERCANTILE BANKSHARES	801	877	288	3
	Lilly Corp Center, Indianapolis, IN 46285/317-276-2000						1166 Ave of the Americas, New York, NY 10036/212-345-5000						Two Hopkins Plaza, Baltimore, MD 21201/301-237-5900				
68	LIMITED (THE)	155	105	363	8	559	MARSHALL & ILSLEY	675	353	215	3	489	MERCANTILE STORES	357	317	543	8
	Two Limited Pkwy, Columbus, OH 43216/614-479-7000						770 North Water St, Milwaukee, WI 53202/414-765-7801						9450 Seward Rd, Fairfield, OH 45014/513-860-8000				
201	LIN BROADCASTING	823	961	412	22	291	MARTIN MARIETTA	160	132	347	1	824	MERCHANTS NATIONAL	789	863	268	3
	5295 Carillon Point, Kirkland, WA 98033/206-828-1902						6801 Rockledge Dr, Bethesda, MD 20817/301-897-6000						One Merchants Plaza, Indianapolis, IN 46255/317-267-7000				
336	LINCOLN NATIONAL	101	189	49	17	899	MARVEL ENTERTAINMENT	967	831	985	20	5	MERCK	112	4	185	12
	1300 South Clinton St, Fort Wayne, IN 46801/219-455-2000						387 Park Ave South, New York, NY 10016/212-696-0808						126 East Lincoln Ave, Rahway, NJ 07065/908-594-4000				
853	LINEAR TECHNOLOGY	971	804	976	9	196	MASCO	287	603	349	6	597	MERCURY FINANCE	966	698	817	17
	1630 McCarthy Blvd, Milpitas, CA 95035/408-432-1900						21001 Van Born Rd, Taylor, MI 48180/313-274-7400						40 Skokie Blvd, Northbrook, IL 60062/708-564-3720				
389	LITTON INDUSTRIES	175	474	293	9	922	MASCO INDUSTRIES	504	890	494	2	566	MERIDIAN BANCORP	556	335	149	3
	360 North Crescent Dr, Beverly Hills, CA 90210/213-859-5000						21001 Van Born Rd, Taylor, MI 48180/313-274-7400						35 North Sixth St, Reading, PA 19601/215-320-2000				
218	LIZ CLAIBORNE	403	180	679	6	374	MATTEL	464	312	683	14	127	MERRILL LYNCH	59	49	16	17
	1441 Broadway, New York, NY 10018/212-354-4900						333 Continental Blvd, El Segundo, CA 90245/213-524-2000						250 Vesey St, North Tower, New York, NY 10281/212-449-1000				
271	LOCKHEED	93	135	241	1	727	MAXUS ENERGY	689	897	595	11	901	MERRY-GO-ROUND	702	638	901	8
	4500 Park Granada Blvd, Calabasas, CA 91399/818-876-2000						717 North Harwood St, Dallas, TX 75201/214-953-2000						3300 Fashion Way, Joppy, MO 21085/301-538-1000				
426	LOCTITE	778	462	815	4	98	MAY DEPARTMENT STORES	80	82	203	8	500	METRO MOBILE CTS	912	951	865	22
	Ten Columbus Blvd, Hartford, CT 06106/203-520-5000						611 Olive St, St. Louis, MO 63101/314-342-6300						110 East 59th St, New York, NY 10022/212-605-0800				
95	LOEWS	47	36	42	17	378	MAYTAG	297	427	434	6	848	MEYER (FRED)	327	597	693	8
	667 Madison Ave, New York, NY 10021/212-545-2000						403 West Fourth St North, Newton, IA 50208/515-792-8000						3800 SE 22nd Ave, Portland, OR 97202/503-232-8844				
296	LONG ISLAND LIGHTING	343	138	183	24	380	MBIA	903	262	462	17	571	MGIC INVESTMENT	886	442	708	17
	175 East Old Country Rd, Hicksville, NY 11801/516-933-4590						113 King St, Armonk, NY 10504/914-273-4545						270 East Kilbourn Ave, Milwaukee, WI 53202/414-347-6480				
774	LONGS DRUG STORES	363	539	778	12	393	MBNA	580	250	264	3	983	MGM GRAND	955	898	829	14
	141 North Civic Dr, Walnut Creek, CA 94596/415-937-1170						400 Christiana Rd, Newark, DE 19713/302-453-9930						9333 Wilshire Blvd, Beverly Hills, CA 90210/213-271-3793				
701	LONGVIEW FIBRE	736	812	702	7	131	MCCAW CELLULAR	523	981	202	22	833	MICHIGAN NATIONAL	591	558	161	3
	End of Fibre Way, Longview, WA 98632/206-425-1550						5400 Carillon Point, Kirkland, WA 98033/206-827-4500						27777 Inkster Rd, Farmington Hills, MI 48334/313-473-3000				
596	LORAL	306	324	438	9	875	MCCLATCHEY NEWSPAPERS	839	776	833	20	784	MICRON TECHNOLOGY	826	835	762	9
	600 Third Ave, New York, NY 10016/212-697-1105						2100 Q St, Sacramento, CA 95816/916-321-1000						2805 East Columbia Rd, Boise, ID 83706/208-368-4000				
501	LOTUS DEVELOPMENT	677	617	759	18	352	MCCORMICK	511	418	689	10	24	MICROSOFT	374	66	481	18
	55 Cambridge Pkwy, Cambridge, MA 02142/617-577-8500						18 Loveton Circle, Sparks, MD 21152/410-771-7301						One Microsoft Way, Redmond, WA 98052/206-882-8080				
723	LOUISIANA LAND	680	801	637	11	579	MCDERMOTT INTL.	254	659	381	21	972	MID-AMERICAN WASTE	964	826	887	21
	909 Poydras St, New Orleans, LA 70112/504-566-6500						1010 Common St, New Orleans, LA 70112/504-587-5400						1006 Walnut St, Canal Winchester, OH 43110/614-833-9155				
334	LOUISIANA-PACIFIC	440	535	488	19	43	MCDONALD'S	141	37	157	14	615	MIDWEST RESOURCES	608	447	448	24
	111 SW Fifth Ave, Portland, OR 97204/503-221-0800						One McDonald's Plaza, Oak Brook, IL 60521/708-575-3000						666 Grand Ave, Des Moines, IA 50306/515-242-4300				
485	LOWE'S	292	861	598	8	307	MCDONNELL DOUGLAS	32	121	110	1	966	MILLER (HERMAN)	686	876	836	18
	Hwy 268 East, North Wilkesboro, NC 28659/919-651-4000						McDonnell & Airport Rd, St. Louis, MO 63134/314-232-0232						8500 Byron Rd, Zeeland, MI 49464/616-772-3300				
						267	MCGRAW-HILL	417	255	436	20	616	MILLIPORE	698	512	739	9
							1221 Ave of the Americas, New York, NY 10020/212-512-2000						80 Ashby Rd, Bedford, MA 01730/617-275-9200				
						79	MCI COMMUNICATIONS	114	74	197	22	27	MINNESOTA MINING & MFG.	50	25	155	15
							1133 19th St NW, Washington, DC 20036/202-872-1600						3M Center, St. Paul, MN 55144/612-733-1110				
						528	MCKESSON	95	360	422	12						
							One Post St, San Francisco, CA 94104/415-983-8300										



*The number to the left of the company's name identifies its rank in market value among The Business Week 1000.
For explanation of other rankings, see page 211.*

RANK		OTHER RANKINGS				RANK		OTHER RANKINGS				RANK		OTHER RANKINGS			
COMPANY		SALES	PROFITS	ASSETS	NO. OF	COMPANY		SALES	PROFITS	ASSETS	NO. OF	COMPANY		SALES	PROFITS	ASSETS	NO. OF
663	MINNESOTA POWER 30 West Superior St. Duluth, MN 55802/218-722-2641	814	440	570	24	531	MONTANA POWER 40 East Broadway, Butte, MT 59701/406-723-5421	808	337	495	24	623	MULTIMEDIA 305 South Main St., Greenville, SC 29602/803-298-4373	792	571	811	20
767	MIRAGE RESORTS 3400 Las Vegas Blvd. South, Las Vegas, NV 89109/702-791-7111	639	748	626	14	56	MORGAN (J. P.) 60 Wall St., New York, NY 10260/212-483-2323	83	28	11	3	457	MURPHY OIL 200 Peach St., El Dorado, AR 71730/501-862-4411	445	892	476	11
797	MITCHELL ENERGY 2001 Timberloch Place, The Woodlands, TX 77380/713-377-5500	657	569	471	11	188	MORGAN STANLEY GROUP 1251 Ave. of the Americas, New York, NY 10020/212-703-4000	137	94	19	17	526	MYLAN LABORATORIES 130 Seventh St., Pittsburgh, PA 15222, 412-232-0100	965	664	944	12
791	MNC FINANCIAL 100 South Charles St., Baltimore, MD 21202/301-244-5000	385	933	97	3	908	MORRISON 4721 Morrison Dr., Mobile, AL 36609/205-344-3000	619	735	892	14	<i>n</i>					
18	MOBIL 3225 Gallows Rd., Fairfax, VA 22037/703-846-3000	7	6	39	11	804	MORRISON KNUDSEN 720 Park Blvd., Boise, ID 83729/208-386-5000	410	679	687	21						
412	MOLEX 2222 Wellington Court, Lisle, IL 60532/708-969-4550	700	500	744	9	253	MORTON INTERNATIONAL 100 North Riverside Plaza, Chicago, IL 60606/312-807-2000	412	264	507	4		322	NALCO CHEMICAL One Nalco Center, Naperville, IL 60563/708-305-1000	548	277	620
82	MONSANTO 800 North Lindbergh Blvd., St. Louis, MO 63167/314-694-1000	104	145	194	4	63	MOTOROLA 1303 East Algonquin Rd., Schaumburg, IL 60196/708-576-5000	73	97	189	9	309	NATIONAL CITY 1900 East Ninth St., Cleveland, OH 44114/216-575-2000	337	176	72	3

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MKT RANK	COMPANY	OTHER RANKINGS			IND NO	MKT RANK	COMPANY	OTHER RANKINGS			IND NO	MKT RANK	COMPANY	OTHER RANKINGS			IND NO
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
724	NATIONAL FUEL GAS	648	542	553	24	387	NEW ENGLAND ELECTRIC	395	210	319	24	84	NORFOLK SOUTHERN	213	727	172	23
	Ten Lafayette Square, Buffalo, NY 14203/716-857-7000						25 Research Dr, Westboro, MA 01582/508-366-9011						Three Commercial Place, Norfolk, VA 23510/804-629-2680				
310	NATIONAL HEALTH LABS.	755	341	870	12	652	NEW PLAN REALTY TRUST	987	616	846	13	280	NORTHEAST UTILITIES	321	152	232	24
	7590 Fay Ave, La Jolla, CA 92037/619-454-3314						1120 Ave of the Americas, New York, NY 10036/212-869-3000						107 Selden St, Berlin, CT 06037/203-665-5000				
297	NATIONAL MEDICAL ENTS.	234	148	337	12	404	NEW YORK STATE E&G	481	229	303	24	305	NORTHERN STATES POWER	382	193	307	24
	2700 Colorado Ave, Santa Monica, CA 90404/213-315-8000						4500 Vestal Pkwy East, Binghamton, NY 13902/607-729-2551						414 Nicollet Mall, Minneapolis, MN 55401/612-330-5500				
903	NATIONAL PRESTO	951	667	933	6	342	NEW YORK TIMES	439	579	482	20	406	NORTHERN TRUST	544	291	124	3
	3925 North Hastings Way, Eau Claire, WI 54603/715-839-2121						229 West 43rd St, New York, NY 10036/212-556-1234						50 South La Salle St, Chicago, IL 60675/312-630-6000				
570	NATIONAL SEMICONDUCTOR	458	957	682	9	270	NEWELL	586	323	675	15	545	NORTHROP	170	155	386	1
	2900 Semiconductor Dr, Santa Clara, CA 95052/408-721-5000						29 East Stephenson St, Freeport, IL 61032/815-234-4171						1840 Century Park East, Los Angeles, CA 90067/213-553-6262				
535	NATIONAL SERVICE INDS.	471	763	690	9	183	NEWMONT GOLD	772	297	731	16	178	NORWEST	216	108	43	3
	1420 Peachtree St NE, Atlanta, GA 30309/404-853-1000						1700 Lincoln St, Denver, CO 80203/303-863-7414						Sixth & Marquette, Minneapolis, MN 55479/612-667-1234				
59	NATIONS BANK	68	201	9	3	264	NEWMONT MINING	750	372	729	16	662	NOVACARE	919	757	962	12
	One NationsBank Plaza, Charlotte, NC 28255/704-386-5000						1700 Lincoln St, Denver, CO 80203/303-863-7414						2570 Blvd of the Generals, Valley Forge, PA 19482/215-631-9300				
548	NAVISTAR INTERNATIONAL	255	959	373	2	320	NIAGARA MOHAWK POWER	263	167	209	24	83	NOVELL	710	216	736	18
	455 North Cityfront Plaza Dr, Chicago, IL 60611/312-836-2000						300 Erie Blvd West, Syracuse, NY 13202/315-474-1511						122 East 1700 South, Provo, UT 84606/801-379-5900				
216	NBD BANCORP	326	147	62	3	555	NICOR	491	331	490	24	383	NUCOR	505	489	663	16
	611 Woodward Ave, Detroit, MI 48226/313-225-1000						1700 West Ferry Rd, Naperville, IL 60563/708-305-9500						2100 Rexford Rd, Charlotte, NC 28211/704-366-7000				
943	NCH	727	630	851	6	146	NIKE	278	139	539	6	42	NYNEX	52	60	66	22
	2727 Chemsearch Blvd, Irving, TX 75062/214-438-0211						One Bowerman Dr, Beaverton, OR 97005/503-671-6453						335 Madison Ave, New York, NY 10017/212-370-7400				
963	NEIMAN MARCUS GROUP	432	867	651	8	458	NIPSCO INDUSTRIES	486	261	357	24						
	27 Boylston St, Chestnut Hill, MA 02167/617-237-0760						5265 Hohman Ave, Hammond, IN 46320/219-853-5200										
904	NERCO	635	405	478	11	933	NOBLE AFFILIATES	909	810	795	11						
	500 NE Multnomah St, Portland, OR 97232/503-731-6600						110 West Broadway, Ardmore, OK 73401/405-223-4110										
887	NEUTROGENA	914	790	969	6	657	NORDSON	854	681	910	15	134	OCCIDENTAL PETROLEUM	86	112	101	11
	5760 West 96th St, Los Angeles, CA 90045/213-642-1150						28601 Clemens Rd, Westlake, OH 44145/216-892-1580						10889 Wilshire Blvd, Los Angeles, CA 90024/213-208-8800				
852	NEVADA POWER	787	677	622	24	237	NORDSTROM	282	275	499	8	894	OCTEL COMMUNICATIONS	944	809	960	22
	6226 West Sahara Ave, Las Vegas, NV 89102/702-367-5000						1501 Fifth Ave, Seattle, WA 98101/206-628-2111						890 Tasman Dr, Milpitas, CA 95035/408-942-2527				

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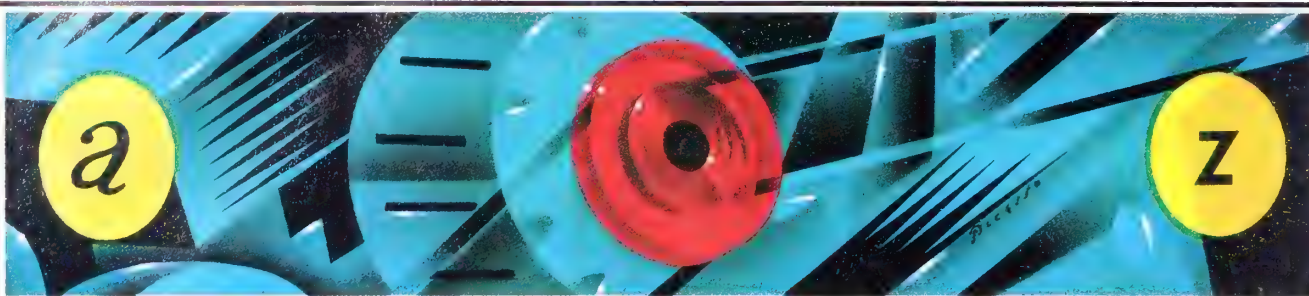
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ALPHABETICAL LIST OF COMPANIES



The number to the left of the company's name identifies its rank in market value among *The Business Week* 1000.
For explanation of other rankings, see page 164.

MKT RANK	COMPANY	OTHER RANKINGS SALES PROFITS ASSETS	IND. NO.	MKT RANK	COMPANY	OTHER RANKINGS SALES PROFITS ASSETS	IND. NO.	MKT RANK	COMPANY	OTHER RANKINGS SALES PROFITS ASSETS	IND. NO.
854	OEA 34501 East Quincy Ave. Denver, CO 80015/303-693-1248	977 841 987	1	329	PALL 2200 Northern Blvd., East Hills, NY 11548/516-484-5400	723 416 741	5	470	PINNACLE WEST CAPITAL 400 East Van Buren St., Phoenix, AZ 85004/602-379-2500	501 978 246	24
476	OFFICE DEPOT 2200 Old Germantown Rd., Delray Beach, FL 33445/407-278-4800	538 836 810	21	447	PANHANDLE EASTERN 5400 Westheimer Court, Houston, TX 77056/713-627-5400	354 398 256	24	373	PIONEER HI-BRED INTL. 400 Locust St., Des Moines, IA 50309/515-245-3500	582 333 625	10
620	OGDEN Two Pennsylvania Plaza, New York, NY 10121/212-868-6000	480 528 403	5	143	PARAMOUNT COMMUNS. 15 Columbus Circle, New York, NY 10023/212-373-8000	226 256 240	14	152	PITNEY BOWES One Elm Croft Rd., Stamford, CT 06926/203-356-5000	269 149 247	18
698	OGDEN PROJECTS 40 Lane Rd., Fairfield, OH 07007/201-882-9000	863 552 500	24	445	PARKER HANNIFIN 17325 Euclid Ave., Cleveland, OH 44112/216-531-3000	366 589 524	15	881	PITTSTON 100 First Stamford Place, Stamford, CT 06912/203-978-5200	415 911 633	11
638	OHIO CASUALTY 136 North Third St., Hamilton, OH 45025/513-867-3000	447 361 364	17	1000	PAYCHEX 911 Panorama Trail South, Rochester, NY 14625/716-385-6666	954 851 989	18	149	PNC FINANCIAL Fifth Ave. & Wood St., Pittsburgh, PA 15265/412-762-2000	212 110 36	3
265	OHIO EDISON 76 South Main St., Akron, OH 44308/216-384-5100	365 154 214	24	578	PENN CENTRAL One East Fourth St., Cincinnati, OH 45202/513-579-6600	455 499 377	5	495	POLAROID 549 Technology Square, Cambridge, MA 02139/617-577-2000	399 50 522	14
452	OKLAHOMA G&E 321 North Harvey Ave., Oklahoma City, OK 73101/405-272-3000	532 279 432	24	96	PENNEY (J.C.) 14841 North Dallas Pkwy., Dallas, TX 75240/214-591-1000	34 79 130	8	468	POLICY MANAGEMENT 177 & U. S. 21 North, Columbia, SC 29016/803-735-4000	843 575 808	17
583	OLD KENT FINANCIAL One Vandenberg Center, Grand Rapids, MI 49503/616-771-5000	658 377 200	3	208	PENNSYLVANIA POWER Two North Ninth St., Allentown, PA 18101/215-774-5151	341 122 211	24	753	PORTLAND GENERAL 121 SW Salmon St., Portland, OR 97204/503-464-8000	642 886 421	24
669	OLD REPUBLIC INTL. 307 North Michigan Ave., Chicago, IL 60601/312-346-8100	527 309 353	17	396	PENNZOIL 700 Milam St., Houston, TX 77002/713-546-4000	330 919 285	11	520	POTLATCH One Maritime Plaza, San Francisco, CA 94111/415-576-8800	549 536 521	19
621	OLIN 120 Long Ridge Rd., Stamford, CT 06904/203-356-2000	375 899 504	4	996	PENTAIR 1700 West Hwy 36, St. Paul, MN 55113/612-636-7920	571 632 743	15	290	POTOMAC ELECTRIC POWER 1900 Pennsylvania Ave NW, Washington, DC 20068/202-872-2000	483 188 266	24
625	OMNICOM GROUP 437 Madison Ave., New York, NY 10022/212-415-3600	550 530 561	21	665	PEOPLES ENERGY 122 South Michigan Ave., Chicago, IL 60603/312-431-4000	588 461 559	24	115	PPG INDUSTRIES One PPG Place, Pittsburgh, PA 15272/412-434-3131	171 202 263	13
285	ORACLE SYSTEMS 500 Oracle Pkwy., Redwood Shores, CA 94065/415-506-7000	594 690 749	18	557	PEP BOYS 3111 West Allegheny Ave., Philadelphia, PA 19132/215-229-9000	625 673 728	8	937	PRECISION CASTPARTS 4600 SE Horney Dr., Portland, OR 97206/503-777-3881	764 588 854	16
431	ORYX ENERGY 13155 Noel Rd., Dallas, TX 75240/214-715-4000	470 813 325	11	15	PEPSICO 700 Anderson Hill Rd., Purchase, NY 10577/914-253-2000	27 30 91	6	460	PREMARK INTERNATIONAL 1717 Deerfield Rd., Deerfield, IL 60015/708-405-6000	311 343 509	5
868	OVERSEAS SHIPHOLDING 1114 Ave. of the Americas, New York, NY 10036/212-869-1222	842 540 572	23	563	PERKIN-ELMER 761 Main Ave., Norwalk, CT 06859/203-762-1000	654 882 733	9	416	PREMIER INDUSTRIAL 4500 Euclid Ave., Cleveland, OH 44103/216-391-8300	746 454 883	21
463	OWENS-CORNING Fiberglas Tower, Toledo, OH 43659/419-248-8000	314 986 489	13	587	PERRIGO 117 Water St., Allegan, MI 49010/616-673-8451	881 814 937	12	314	PRICE 4649 Morena Blvd., San Diego, CA 92117/619-581-4600	129 272 492	8
391	PACCAR 777 106th Ave NE, Bellevue, WA 98004/206-455-7400	369 636 420	2	348	PET 400 South Fourth St., St. Louis, MO 63102/314-621-5400	425 350 574	10	857	PRICE (T. ROWE) 100 East Pratt St., Baltimore, MD 21202/301-547-2000	934 716 958	17
510	PACIFIC ENTERPRISES 633 West Fifth St., Los Angeles, CA 90071/213-895-5000	144 941 235	24	593	PETRIE STORES 70 Enterprise Ave., Secaucus, NJ 07094/201-866-3600	528 857 713	8	184	PRIMERICA 65 East 55th St., New York, NY 10022/212-891-8900	143 93 83	17
50	PACIFIC GAS & ELECTRIC 77 Beale St., San Francisco, CA 94106/415-973-7000	94 31 78	24	16	PFIZER 235 East 42nd St., New York, NY 10017/212-573-2323	132 46 182	12	10	PROCTER & GAMBLE One Procter & Gamble Plaza, Cincinnati, OH 45202/513-983-1100	18 7 75	6
649	PACIFIC TELECOM 805 Broadway, Vancouver, WA 98660/206-696-0983	704 392 552	22	276	PHELPS DODGE 2600 North Central Ave., Phoenix, AZ 85004/602-234-8100	360 153 390	16	619	PROGRESSIVE 6000 Parkland Blvd., Mayfield Heights, OH 44124/216-464-8000	497 696 395	17
37	PACIFIC TELESIS GROUP 130 Kearny St., San Francisco, CA 94108/415-394-3000	89 32 84	22	888	PHH 11333 McCormick Rd., Hunt Valley, MD 21031/301-771-3600	406 574 323	23	641	PROMUS 1023 Cherry Rd., Memphis, TN 38117/901-762-8600	604 721 589	14
840	PACIFICARE HEALTH 5995 Plaza Dr., Cypress, CA 90630/714-952-1121	529 725 835	12	150	PHILADELPHIA ELECTRIC 2301 Market St., Philadelphia, PA 19101/215-841-4000	233 77 129	24	611	PROVIDENT LIFE One Fountain Square, Chattanooga, TN 37402/615-755-1011	308 313 112	17
141	PACIFICORP 700 NE Mullinoh St., Portland, OR 97232/503-731-2000	231 86 123	24	2	PHILIP MORRIS 120 Park Ave., New York, NY 10017/212-880-5000	8 3 30	6	671	PSI RESOURCES 1000 East Main St., Plainfield, IN 46168/317-839-9611	585 734 497	24
836	PAGING NETWORK 4965 Preston Park Blvd., Plano, TX 75093/214-985-4100	950 891 963	22	123	PHILLIPS PETROLEUM Fourth & Keeler Sts., Bartlesville, OK 74004/918-661-6600	51 357 147	11	478	PS OF COLORADO 1225 Seventeenth St., Denver, CO 80202/303-571-7511	430 249 370	24
650	PAINWEBBER GROUP 1285 Ave. of the Americas, New York, NY 10019/212-713-2000	285 244 85	17	815	PHM 33 Bloomfield Hills Pkwy., Bloomfield Hills, MI 48304/313-647-2750	555 623 350	13	757	PS OF NEW HAMPSHIRE 1000 Elm St., Manchester, NH 03105/603-669-4000	699 936 428	24
				900	PIC 'N' SAVE 2430 East Del Amo Blvd., Dominguez, CA 90220/213-537-9220	784 705 876	8	993	PS OF NEW MEXICO 414 Silver Ave SW, Albuquerque, NM 87102/505-848-2700	661 770 452	24
				884	PICTURETEL One Corporation Way, Peabody, MA 01960/508-977-9500	982 869 973	22	119	PUBLIC SERVICE ENT. 80 Park Plaza, Newark, NJ 07101/201-430-7000	182 67 111	24

MKT RANK	COMPANY	OTHER RANKINGS			IND NO
		SALES	PROFITS	ASSETS	
790	PUGET SOUND BANCORP 1119 Pacific Ave, Tacoma, WA 98401/206-593-3600	807	568	304	3
511	PUGET SOUND POWER 411 108th Ave NE, Bellevue, WA 98004/206-454-6363	628	281	439	24
167	QUAKER OATS 321 North Clark St, Chicago, IL 60610/312-222-7111	173	160	404	10
749	QUALITY FOOD CENTERS 10116 NE Eighth St, Bellevue, WA 98004/206-455-3761	850	806	982	10
798	QUANTUM 500 McCarthy Blvd, Milpitas, CA 95035/408-894-4000	600	562	828	18
756	QUESTAR 180 East 100th St South, Salt Lake City, UT 84111/801-534-5000	747	496	638	24
126	RALSTON PURINA Checkerboard Square, St. Louis, MO 63164/314-982-1000	124	111	309	10
504	RAYCHEM 300 Constitution Dr, Menlo Park, CA 94025/415-361-3333	543	905	619	9
117	RAYTHEON 141 Spring St, Lexington, MA 02173/617-862-6600	98	61	262	9
140	READER'S DIGEST Reader's Digest Rd, Pleasantville, NY 10570/914-238-1000	352	183	520	20
251	REEBOK INTERNATIONAL 100 Technology Center Dr, Sloughdon, MA 02072/617-341-5000	325	173	601	6
357	REPUBLIC NEW YORK 452 Fifth Ave, New York, NY 10018/212-525-5000	346	179	57	3
224	REYNOLDS METALS 6601 West Broad St, Richmond, VA 23261/804-281-2000	167	239	236	16
89	RHONE-POULENC RORER 500 Arcola Rd, Collegeville, PA 19426/215-454-8000	239	128	333	12
399	RITE AID 431 Railroad Ave, Shiremanstown, PA 17011/717-761-2633	245	311	538	12
54	RJR NABISCO HOLDINGS 1301 Ave of the Americas, New York, NY 10019/212-258-5600	39	117	55	6
266	ROADWAY SERVICES 1077 Gorge Blvd, Akron, OH 44309/216-384-8184	283	292	583	23
765	ROCHESTER G&E 89 East Ave, Rochester, NY 14649/716-546-2700	662	524	514	24
600	ROCHESTER TELEPHONE 180 South Clinton Ave, Rochester, NY 14646/716-777-1000	717	452	590	22
834	ROCKEFELLER CENTER 1166 Ave of the Americas, New York, NY 10036/212-841-7760	963	649	592	13
121	ROCKWELL INTERNATIONAL 2231 Seal Beach Blvd, Seal Beach, CA 90740/213-797-3311	70	65	193	5
223	ROHM & HAAS Independence Mall West, Philadelphia, PA 19105/215-592-3000	319	230	411	4
788	ROLLINS 2170 Piedmont Rd NE, Atlanta, GA 30324/404-888-2000	819	708	948	21
713	ROLLINS ENVIRONMENTAL 2200 Concord Pike, Wilmington, DE 19803/302-479-2700	924	761	931	21
737	ROUSE 10275 Little Patuxent Pkwy, Columbia, MD 21044/301-992-6000	771	872	426	13
801	ROYAL APPLIANCE MFG. 650 Alpha Dr, Cleveland, OH 44143/216-449-6150	902	745	980	6
795	RPM 2628 Pearl Rd, Medina, OH 44258/216-273-5090	806	713	821	13
154	RUBBERMAID 1147 Akron Rd, Wooster, OH 44691/216-264-6464	456	232	631	15
471	RUSSELL One Lee St, Alexander City, AL 35010/205-329-4000	684	531	730	6
863	RYAN'S FAMILY STEAK 405 Lancaster Ave, Greer, SC 29650/803-879-1000	885	779	939	14
414	RYDER SYSTEM 3600 NW 82nd Ave, Miami, FL 33166/305-593-3726	184	483	294	23
260	SAFECO Safeco Plaza, Seattle, WA 98185/206-545-5000	284	157	140	17
488	SAFETY-KLEEN 777 Big Timber Rd, Elgin, IL 60123/708-697-8460	718	555	720	21
421	SAFEWAY 201 Fourth St, Oakland, CA 94607/510-891-3000	38	426	289	10
231	SALOMON Seven World Trade Center, New York, NY 10048/212-783-7000	100	87	13	17
325	SAN DIEGO G&E 101 Ash St, San Diego, CA 92101/619-696-2000	431	190	351	24
930	SANTA FE ENERGY 1616 South Voss, Houston, TX 77057/713-783-2401	857	817	706	11
362	SANTA FE PACIFIC 1700 East Golf Rd, Schaumburg, IL 60173/708-995-6000	364	363	286	23

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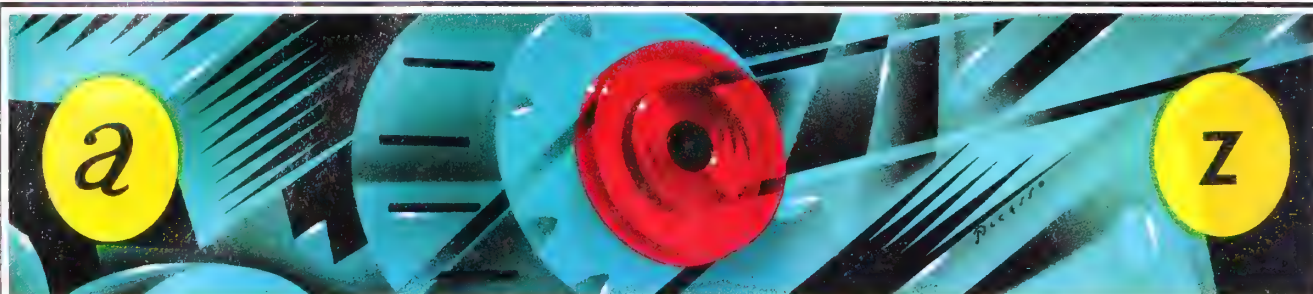
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UNQUESTIONED LIFETIME MECHANICAL GUARANTEE.
BALL-POINT PEN, PENCIL OR ROLLING BALL. SUGGESTED RETAIL PRICES START AT \$22.50.

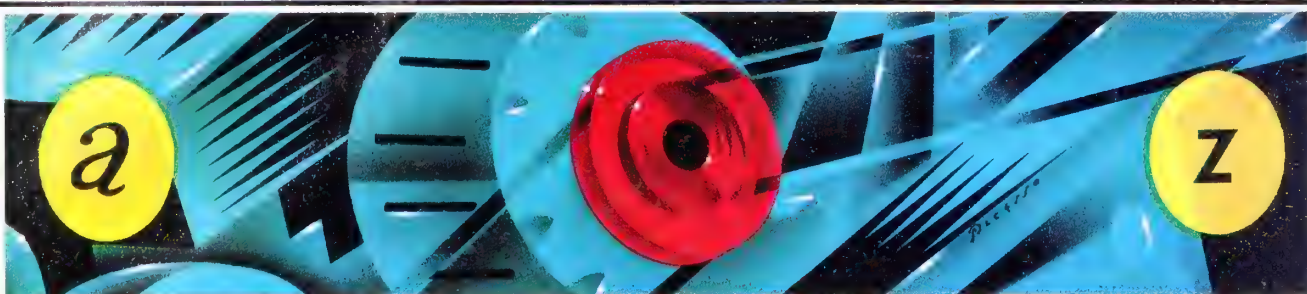
ALPHABETICAL LIST OF COMPANIES



The number to the left of the company's name identifies its rank in market value among The Business Week 1000.
For explanation of other rankings, see page 164.

MKT RANK	COMPANY	OTHER RANKINGS			IND NO	MKT RANK	COMPANY	OTHER RANKINGS			IND NO	MKT RANK	COMPANY	OTHER RANKINGS			IND NO
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
51	SARA LEE Three First National Plaza, Chicago, IL 60602/312-726-2600	57	47	180	10	712	SIGNET BANKING Seven North Eighth St., Richmond, VA 23219/804-747-2000	536	909	152	3	825	STANHOME 333 Western Ave., Westfield, MA 01085/413-562-3631	711	600	867	6
931	SAVANNAH FOODS Two East Bryan St., Savannah, GA 31402/912-234-1261	561	647	862	10	552	SILICON GRAPHICS 2011 North Shoreline Blvd., Mountain View, CA 94039/415-960-1980	743	666	767	18	358	STANLEY WORKS 1000 Stanley Dr., New Britain, CT 06053/203-225-5111	413	365	569	15
859	SBARRO 763 Larkfield Rd., Commack, NY 11725/516-864-0200	930	792	970	14	541	SMITH'S FOOD & DRUG 1550 South Redwood Rd., Salt Lake City, UT 84104/801-974-1400	381	599	650	10	918	STAPLES 100 Pennsylvania Ave., Framingham, MA 01701/508-370-8500	783	858	919	21
440	SCANA 1426 Main St., Columbia, SC 29218/803-748-3000	576	265	378	24	661	SMUCKER (J.M.) Strawberry Lane, Orrville, OH 44667/216-682-3000	818	691	929	10	695	STAR BANC 425 Walnut St., Cincinnati, OH 45202/513-632-4000	733	482	239	3
76	SCECORP 2244 Walnut Grove Ave., Rosemead, CA 91770/818-302-1212	122	45	94	24	433	SNAP-ON TOOLS 2801 80th St., Kenosha, WI 53141/414-656-5200	644	453	705	15	338	STATE STREET BOSTON 225 Franklin St., Boston, MA 02110/617-786-3000	526	269	108	3
53	SCHERING-PLOUGH One Giraldo Farms, Madison, NJ 07940/201-822-7000	247	55	342	12	397	SOCIETY 800 Superior Ave., Cleveland, OH 44114/216-689-3000	468	231	107	3	696	STEWART & STEVENSON 2707 North Loop West, Houston, TX 77008/713-868-7700	724	704	871	15
44	SCHLUMBERGER 277 Park Ave., New York, NY 10172/212-350-9400	156	42	229	11	517	SONAT 1900 Fifth Ave., North, Birmingham, AL 35203/205-325-3800	513	431	383	24	381	STONE CONTAINER 150 North Michigan Ave., Chicago, IL 60601/312-346-6600	176	921	228	7
469	SCHULMAN (A.) 3550 West Market St., Akron, OH 44333/216-666-3751	713	627	879	4	418	SONOCO PRODUCTS North Second St., Hartsville, SC 29550/803-383-7000	443	368	662	7	987	STOP & SHOP 60 Campanelli Dr., Braintree, MA 02184/617-380-8000	183	762	487	10
518	SCHWAB (CHARLES) 101 Montgomery St., San Francisco, CA 94104/415-627-7000	688	564	300	17	741	SOTHEBY'S HOLDINGS 1334 York Ave., New York, NY 10021/212-606-7000	907	787	812	21	283	STORAGE TECHNOLOGY 2270 South 88th St., Louisville, CO 80028/303-673-5151	477	376	550	18
599	SCIMED LIFE SYSTEMS 6655 Wedgwood Rd., Maple Grove, MN 55369/612-420-0700	948	722	964	12	69	SOUTHERN 64 Perimeter Center East, Atlanta, GA 30346/404-393-0650	116	33	79	24	565	STRATUS COMPUTER 55 Fairbanks Blvd., Marlboro, MA 01752/508-460-2000	829	561	878	18
238	SCOTT PAPER Scott Plaza, Philadelphia, PA 19113/215-522-5000	188	932	245	19	978	SOUTHERN INDIANA G&E 20 NW Fourth St., Evansville, IN 47741/812-464-4669	879	646	751	24	482	STRIDE RITE Five Cambridge Center, Cambridge, MA 02142/617-491-8800	770	480	902	6
394	SCRIPPS (E.W.) 1100 Central Trust Tower, Cincinnati, OH 45202/513-977-3000	539	490	551	20	392	SO. NEW ENGLAND TEL. 227 Church St., New Haven, CT 06506/203-771-5200	461	296	362	22	909	STRUCTURAL DYNAMICS 2000 Eastman Dr., Millford, OH 45150/513-576-2400	956	823	977	18
607	SEAGATE TECHNOLOGY 920 Disc Dr., Scotts Valley, CA 95067/408-438-6550	332	896	541	18	796	SOUTHLAND 2711 North Haskell Ave., Dallas, TX 75204/214-828-7011	119	917	419	10	402	STRYKER 2725 Fairfield Rd., Kalamazoo, MI 49002/616-385-2600	861	694	936	12
975	SEALED AIR Park 80 East, Saddle Brook, NJ 07662/201-791-7600	835	832	923	15	642	SOUTHRUST 420 North 20th St., Birmingham, AL 35203/205-254-5000	632	390	171	3	129	STUDENT LOAN MKTG. 1050 Jefferson St. NW, Washington, DC 20007/202-333-8000	275	125	35	17
38	SEARS, ROEBUCK Sears Tower, Chicago, IL 60684/312-875-2500	6	26	10	8	441	SOUTHWEST AIRLINES 2702 Love Field Dr., Dallas, TX 75235/214-904-4000	533	749	528	23	257	SUN 1801 Market St., Philadelphia, PA 19103/215-293-6000	63	954	220	11
168	SECURITY PACIFIC 333 South Hope St., Los Angeles, CA 90071/213-345-6211	102	992	18	3	30	SOUTHWESTERN BELL One Bell Center, St. Louis, MO 63101/314-235-9800	97	24	76	22	252	SUN MICROSYSTEMS 2550 Garcia Ave., Mountain View, CA 94043/415-960-1300	256	203	454	18
775	SENSORMATIC 500 NW 12th Ave., Deerfield Beach, FL 33442/305-427-9700	901	740	860	9	529	SOUTHWESTERN PS 600 South Tyler St., Amarillo, TX 79101/806-378-2121	703	327	556	24	450	SUNDSTRAND 4949 Harrison Ave., Rockford, IL 61108/815-226-6000	454	330	547	1
507	SERVICE CORP. INTL. 1929 Allen Pkwy., Houston, TX 77019/713-522-5141	737	451	485	21	968	SPI PHARMACEUTICALS 3300 Hyland Ave., Costa Mesa, CA 92626/714-545-0100	922	789	927	12	164	SUNTRUST BANKS 25 Park Place NE, Atlanta, GA 30303/404-588-7711	267	116	48	3
676	SERVICE MERCHANDISE 7100 Service Merchandise Dr., Brentwood, TN 37027/615-660-6000	261	436	533	8	768	SPIEGEL 1515 West 22nd St., Oak Brook, IL 60522/708-986-8800	411	828	546	8	384	SUPER VALU STORES 11840 Valley View, Eden Prairie, MN 55344/612-828-4000	79	192	431	10
472	SHAW INDUSTRIES 616 East Walnut Ave., Dalton, GA 30720/404-278-3812	465	671	732	15	808	SPRINGS INDUSTRIES 205 North White St., Fort Mill, SC 29715/803-547-3780	424	746	630	15	523	SURGICAL CARE 102 Woodmont Blvd., Nashville, TN 37205/615-385-3541	946	803	959	12
624	SHAWMUT NATIONAL 777 Main St., Hartford, CT 06115/203-728-2000	367	962	81	3	169	SPRINT 2330 Shawnee Mission, Westwood, KS 66205/913-624-3000	106	118	164	22	666	SYMANTEC 10201 Torre Ave., Cupertino, CA 95014/408-253-9600	942	830	988	18
312	SHERWIN-WILLIAMS 101 Prospect Ave., Cleveland, OH 44115/216-566-2000	345	287	562	13	539	ST. JOE PAPER 1650 Prudential Dr., Jacksonville, FL 32207/904-396-6600	768	743	615	7	992	SYMBOL TECHNOLOGIES 116 Wilbur Place, Bohemia, NY 11716/516-563-2400	882	781	899	18
601	SHONEY'S 1727 Elm Hill Pike, Nashville, TN 37210/615-391-5201	622	652	863	14	367	ST. JUDE MEDICAL One Lillehei Plaza, St. Paul, MN 55117/612-483-2000	929	403	882	12	550	SYNERGEN 1885 33rd St., Boulder, CO 80302/303-938-6200	996	885	886	12
959	SHOPKO STORES 700 Pilgrim Way, Green Bay, WI 54307/414-496-4158	476	565	723	8	256	ST. PAUL 385 Washington St., St. Paul, MN 55102/612-221-7911	218	103	126	17	886	SYNOVUS FINANCIAL 901 Front Ave., Columbus, GA 31901/404-649-2387	811	634	339	3
902	SIERRA PACIFIC 6100 Neil Rd., Reno, NV 89512/702-689-3600	821	586	611	24	876	STANDARD FEDERAL BANK 2600 West Big Beaver Rd., Troy, MI 48064/313-637-2500	649	481	184	17	57	SYNTEX 3401 Hillview Ave., Palo Alto, CA 94304/415-855-5050	414	99	430	12
347	SIGMA-ALDRICH 3050 Spruce St., St. Louis, MO 63103/314-771-5765	761	423	807	12	954	STANDARD REGISTER 600 Albany St., Dayton, OH 45408/513-443-1000	719	700	843	18	191	SYSCO 1390 Enclave Pkwy., Houston, TX 77077/713-584-1390	113	234	464	10

RANK	COMPANY	OTHER RANKINGS			IND NO	RANK	COMPANY	OTHER RANKINGS			IND NO	RANK	COMPANY	OTHER RANKINGS			IND NO
		SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS				SALES	PROFITS	ASSETS	
971	SYSTEM SOFTWARE 500 West Madison St, Chicago, IL 60661/312-641-2900	945	802	975	18	249	TORCHMARK 2001 Third Ave South, Birmingham, AL 35233/205-325-4200	421	165	259	17	461	UNISYS Township Line & Union Meeting Rds, Blue Bell, PA 19424/215-986-4011	109	998	206	18
						675	TOSCO 72 Cummings Point Rd, Stamford, CT 06902/203-977-1000	409	441	695	11	973	UNITED ASSET MGMT. One International Place, Boston, MA 02110/617-330-8900	921	768	847	17
						67	TOYS 'R' US 461 From Rd, Paramus, NJ 07652/201-262-7800	158	126	301	8	294	UNITED HEALTHCARE 9900 Bren Road East, Minnetonka, MN 55343/612-936-1300	666	444	804	12
167	T² MEDICAL 1121 Alderman Dr, Alpharetta, GA 30202/404-442-2160	949	639	942	12	233	TRANSAMERICA 600 Montgomery St, San Francisco, CA 94111/415-983-4000	136	351	50	17	982	UNITED ILLUMINATING 80 Temple St, New Haven, CT 06506/203-787-7200	722	572	465	24
292	TAMBRANDS 777 Westchester Ave, White Plains, NY 10604/914-696-6000	730	428	880	6	700	TRANSATLANTIC HOLDINGS 80 Pine St, New York, NY 10005/212-770-2000	751	467	472	17	674	UNITED INVESTORS MGMT. 2001 Third Ave South, Birmingham, AL 35233/205-325-4200	883	477	632	17
506	TANDEM COMPUTERS 19333 Valico Pkwy, Cupertino, CA 95014/408-725-6000	420	930	512	18	925	TRANSOIL ENERGY 2800 Post Oak Blvd, Houston, TX 77056/713-439-2000	323	958	312	24	927	UNITED MISSOURI 1010 Grand Ave, Kansas City, MO 64106/816-860-7000	848	879	311	3
337	TANDY 1900 One Tandy Center, Fort Worth, TX 76102/817-390-3214	211	222	379	18	360	TRAVELERS One Tower Square, Hartford, CT 06183/203-277-0111	72	136	26	17	116	UNITED TECHNOLOGIES One Financial Plaza, Hartford, CT 06101/203-728-7000	22	996	103	1
999	TCA CABLE TV 3015 SSE Loop 323, Tyler, TX 75701/903-595-3701	962	856	911	20	272	TRIBUNE 435 North Michigan Ave, Chicago, IL 60611/312-222-9100	400	266	413	20	407	UNITRIN One East Wacker Dr, Chicago, IL 60601/312-661-4600	545	273	327	17
353	TECO ENERGY 702 North Franklin St, Tampa, FL 33602/813-228-4111	574	251	405	24	832	TRINITY INDUSTRIES 2525 Stemmons Freeway, Dallas, TX 75207/214-631-4420	559	794	696	23	656	UNIVERSAL 1501 North Hamilton St, Richmond, VA 23230/804-359-9311	303	468	621	6
779	TECUMSEH PRODUCTS 100 East Patterson St, Tecumseh, MI 49286/517-423-8411	565	625	685	13	818	TRINOVA 3000 Strayer, Maumee, OH 43537/419-867-2200	449	963	680	15	688	UNIVERSAL FOODS 433 East Michigan St, Milwaukee, WI 53202/414-271-6755	669	525	770	10
961	TEKTRONIX 14150 SW Karl Braun Dr, Beaverton, OR 97077/503-627-7111	534	604	710	9	516	TRITON ENERGY 6688 North Central Expwy, Dallas, TX 75206/214-691-5200	927	900	783	11	155	UNOCAL 1201 West Fifth St, Los Angeles, CA 90017/213-977-7600	92	455	179	11
120	TELE-COMMUNICATIONS 5619 DTC Pkwy, Englewood, CO 80111/303-267-5500	242	966	132	20	288	TRW 1900 Richmond Rd, Cleveland, OH 44124/216-291-7000	117	955	273	5	263	UNOCAL EXPLORATION 1201 West Fifth St, Los Angeles, CA 90017/213-977-7600	646	259	513	11
481	TELEDYNE 1901 Ave of the Stars, Los Angeles, CA 90067/213-277-3311	280	908	548	5	181	TURNER BROADCASTING One CNN Center, Atlanta, GA 30324/404-827-1700	498	619	467	20	318	UNUM 2211 Congress St, Portland, ME 04122/207-770-2211	361	198	158	17
371	TELEFLEX 630 West Germantown Pike, Plymouth Meeting, PA 19462/215-834-6301	816	726	859	1	618	20th CENTURY INDS. 6301 Owensmouth, Woodland Hills, CA 91367/818-704-3700	645	303	610	17	101	UPJOHN 7000 Portage Rd, Kalamazoo, MI 49001/616-323-4000	258	76	332	12
522	TELEPHONE & DATA 30 North LaSalle St, Chicago, IL 60602/312-630-1900	866	798	612	22	419	TYCO LABORATORIES One Tyco Park, Exeter, NH 03833/603-778-9700	291	356	443	15	46	US WEST 7800 East Orchard Rd, Englewood, CO 80111/303-793-6500	81	71	65	22
262	TEMPLE-INLAND 303 South Temple Dr, Doral, TX 75941/409-829-5511	349	270	174	7	326	TYSON FOODS 2210 Oaklawn Dr, Springdale, AR 72765/501-756-4000	232	254	429	10	711	USAIR GROUP 2345 Crystal Dr, Arlington, VA 22227/703-418-7000	147	976	237	23
161	TENNECO 1010 Milam St, Houston, TX 77002/713-757-2131	46	990	92	5							738	USF&G 100 Light St, Baltimore, MD 21218/301-547-3000	223	956	114	17
397	TERADYNE 321 Harrison Ave, Boston, MA 02118/617-482-2700	802	818	866	9							802	USLIFE 125 Maiden Lane, New York, NY 10038/212-709-6000	518	443	290	17
41	TEXACO 2000 Westchester Ave, White Plains, NY 10650/914-253-4000	13	20	67	11	364	U.S. BANCORP 111 SW Fifth Ave, Portland, OR 97204/503-275-6111	401	207	89	3	130	UST 100 West Putnam Ave, Greenwich, CT 06830/203-661-1100	637	156	781	6
268	TEXAS INSTRUMENTS 13510 North Central Expwy, Dallas, TX 75243/214-995-5550	138	984	299	9	826	U.S. BIOSCIENCE 100 Front St, West Conshohocken, PA 19380/215-832-0570	999	883	986	12	128	USX-MARATHON GROUP 600 Grant St, Pittsburgh, PA 15219/412-433-1121	45	934	143	11
88	TEXAS UTILITIES 2001 Bryan St, Dallas, TX 75201/214-812-4600	190	975	90	24	569	U.S. CELLULAR 8410 West Bryn Mawr, Chicago, IL 60631/312-399-8900	973	906	793	22	498	USX-U.S. STEEL GROUP 600 Grant St, Pittsburgh, PA 15219/412-433-1121	192	985	275	16
236	TEXTRON 40 Westminster St, Providence, RI 02903/401-421-2800	118	142	105	5	230	U.S. HEALTHCARE 980 Jolly Rd, Blue Bell, PA 19422/215-628-4800	438	243	750	12	628	UTILICORP UNITED 911 Main St, Kansas City, MO 64105/816-421-6600	599	450	447	24
580	THERMO ELECTRON 81 Wyman St, Waltham, MA 02254/617-622-1000	685	578	673	9	809	U.S. SHOE One Eastwood Dr, Cincinnati, OH 45227/513-527-7000	324	910	655	8						
838	THERMO INSTRUMENT 504 Airport Rd, Santa Fe, NM 87504/505-471-3232	870	767	827	9	145	U.S. SURGICAL 150 Glover Ave, Norwalk, CT 06856/203-845-1000	668	387	753	12						
590	THOMAS & BETTS 1001 Frontier Rd, Bridgewater, NJ 08807/908-685-1600	777	570	796	9	211	UAL 1200 East Algonquin Rd, Elk Grove Twp, IL 60007/708-952-4000	66	979	191	23	540	VALERO ENERGY 530 McCullough Ave, San Antonio, TX 78215/512-246-2000	613	355	585	11
745	TIFFANY 727 Fifth Ave, New York, NY 10022/212-755-8000	809	706	874	8	710	UJB FINANCIAL 301 Carnegie Center, Princeton, NJ 08543/609-987-3200	546	785	122	3	805	VALHI 5430 LBJ Freeway, Dallas, TX 75240/214-233-1700	693	807	654	5
70	TIME WARNER 75 Rockefeller Plaza, New York, NY 10019/212-484-8000	62	948	68	20	576	UNIFI 7201 West Friendly Rd, Greensboro, NC 27410/919-294-4410	695	669	825	15	781	VALLEY NATIONAL 241 North Central Ave, Phoenix, AZ 85001/602-221-2900	581	683	160	3
180	TIMES MIRROR 220 West First St, Los Angeles, CA 90012/213-237-3700	246	411	341	20	823	UNION BANK 350 California St, San Francisco, CA 94104/415-445-0200	462	375	96	3	771	VALSPAR 1101 Third St South, Minneapolis, MN 55415/612-332-7371	739	732	907	13
739	TIMKEN 1835 Duesenberg Ave SW, Canton, OH 44706/216-438-3000	460	916	536	15	214	UNION CAMP 1600 Valley Rd, Wayne, NJ 07470/201-628-2000	299	300	314	19	867	VALUE CITY DEPT. STORES 3241 Westerville Rd, Columbus, OH 43224/614-471-4722	742	747	930	8
536	TIX 770 Cochituate Rd, Framingham, MA 01701/508-390-3000	320	471	670	8	242	UNION CARBIDE 39 Old Ridgebury Rd, Danbury, CT 06817/203-794-2000	191	952	292	4	751	VANGUARD CELLULAR 2002 Pisgah Church Rd, Greensboro, NC 27408/919-282-3690	984	913	932	22
946	TOKOS MEDICAL 1821 East Dyer Rd, Santa Ana, CA 92705/714-474-1616	968	860	990	12	227	UNION ELECTRIC 1901 Chouteau Ave, St. Louis, MO 63103/314-621-3222	394	130	271	24	731	VARIAN ASSOCIATES 3050 Hansen Way, Palo Alto, CA 94304/415-493-4000	524	550	715	9
755	TOOTSIE ROLL INDUSTRIES 7401 South Cicero Ave, Chicago, IL 60629/312-838-3400	932	754	956	10	72	UNION PACIFIC Eighth & Eaton Aves, Bethlehem, PA 18018/215-861-3200	130	493	125	23	942	VENTURE STORES 2001 East Terra Lane, O'Fallon, MO 63366/314-281-5500	488	629	824	8
743	TOPPS 254 36th St, Brooklyn, NY 11232/718-768-8900	890	538	978	20	465	UNION TEXAS PETROLEUM 1330 Post Oak Blvd, Houston, TX 77056/713-623-6544	597	151	468	11	890	VERIFONE Three Logoon Dr, Redwood City, CA 94065/415-591-6500	940	816	954	18



The number to the left of the company's name identifies its rank in market value among The Business Week 1000.
For explanation of other rankings, see page 164.

OTHER RANKINGS				OTHER RANKINGS				OTHER RANKINGS									
MKT RANK	COMPANY	SALES	PROFITS	ASSETS	IND NO	MKT RANK	COMPANY	SALES	PROFITS	ASSETS	IND NO	MKT RANK	COMPANY	SALES	PROFITS	ASSETS	IND NO
324	VF	300	235	483	6	551	WENDY'S INTERNATIONAL	603	554	712	14	842	XILINX	960	782	974	9
	1047 North Park Rd, Wyomissing, PA 19610/215-378-1151						4288 West Dublin-Granville, Dublin, OH 43017/614-764-3100						2100 Logic Dr, San Jose, CA 95124/408-559-7778				
193	VIACOM	437	920	330	20	964	WESCO FINANCIAL	959	718	716	17	984	XOMA	995	914	971	12
	1515 Broadway, New York, NY 10036/212-258-6000						315 East Colorado Blvd, Pasadena, CA 91101/818-449-2345						2910 Seventh St, Berkeley, CA 94710/510-644-1170				
803	VICOR	989	849	991	9	955	WEST ONE BANCORP	797	631	280	3	677	YELLOW FREIGHT SYSTEM	368	750	672	23
	23 Frontage Rd, Andover, MA 01810/508-470-2900						101 South Capital Blvd, Boise, ID 83702/208-383-7000						10990 Roe Ave, Overland Park, KS 66207/913-345-3000				
554	VONS	178	488	534	10	622	WEST POINT-PEPPERELL	567	894	457	15	668	YORK INTERNATIONAL	459	842	644	13
	618 Michillinda Ave, Arcadia, CA 91007/818-821-7000						233 South Wacker Dr, Chicago, IL 60606/312-876-1724						631 South Richland Ave, York, PA 17403/717-771-7890				
484	VULCAN MATERIALS	614	551	678	13	103	WESTINGHOUSE ELECTRIC	55	997	86	9	BUSINESS WEEK APRIL 3, 1992 *3259 ISSN 0007-7135 					
	One Metroplex Dr, Birmingham, AL 35209/205-877-3000						11 Stanwix St, Pittsburgh, PA 15222/412-244-2000										
						907	WESTMARK INTL.	805	796	849	12						
							701 Fifth Ave, Seattle, WA 98104/206-682-6800										
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	One Mercer Rd, Natick, MA 01760/508-651-6500						8920 Pershall Rd, Hazelwood, MO 63042/314-524-5000										
160	WACHOVIA	288	178	52	3	105	WEYERHAEUSER	108	950	98	19						
	301 North Main St, Winston-Salem, NC 27102/919-770-5000						Tacoma, WA 98477/206-924-2345										
4	WAL-MART STORES	10	9	106	8	278	WHEELABRATOR	569	294	425	24						
	702 SW Eighth St, Bentonville, AR 72712/501-273-4000						3003 Butterfield Rd, Oak Brook, IL 60521/708-572-8800										
182	WALGREEN	133	204	473	12	255	WHIRLPOOL	140	226	258	6						
	200 Wilmot Rd, Deerfield, IL 60015/708-940-2500						2000 M-63, Benton Harbor, MI 49022/616-926-5000										
891	WALLACE COMPUTER	817	670	855	18	453	WHITMAN	362	421	484	5						
	4600 West Roosevelt Rd, Hillside, IL 60162/708-449-8600						3501 Algonquin, Rolling Meadows, IL 60008/708-818-5000										
582	WANG LABORATORIES	419	982	623	18	382	WILLAMETTE INDUSTRIES	404	590	470	19						
	One Industrial Ave, Lowell, MA 01851/508-459-5000						1300 SW Fifth Ave, Portland, OR 97201/503-227-5581										
80	WARNER-LAMBERT	185	268	359	12	464	WILLIAMS	392	326	335	24						
	201 Tabor Rd, Morris Plains, NJ 07950/201-540-2000						One Williams Center, Tulsa, OK 74172/918-588-2000										
694	WASHINGTON FEDERAL S&L	893	448	397	17	670	WILMINGTON TRUST	838	463	340	3						
	425 Pike St, Seattle, WA 98101/206-624-7930						Rodney Square North, Wilmington, DE 19890/302-651-1000										
819	WASHINGTON GAS LIGHT	715	577	666	24	248	WINN-DIXIE STORES	84	221	527	10						
	1100 H St NW, Washington, DC 20080/703-750-4440						5050 Edgewood Court, Jacksonville, FL 32205/904-783-5000										
274	WASHINGTON POST	519	310	579	20	313	WISCONSIN ENERGY	485	208	367	24						
	1150 15th St NW, Washington, DC 20071/202-334-6000						231 West Michigan St, Milwaukee, WI 53201/414-221-2345										
725	WASHINGTON WATER	775	466	577	24	870	WISCONSIN PS	749	544	677	24						
	East 1411 Mission Ave, Spokane, WA 99202/509-489-0500						700 North Adams St, Green Bay, WI 54301/414-433-1598										
25	WASTE MANAGEMENT	120	58	144	21	613	WITCO	463	449	649	4						
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816	WATTS INDUSTRIES	856	685	850	15	204	WOOLWORTH	88	923	283	8						
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752	WAUSAU PAPER MILLS	864	682	940	19	509	WORTHINGTON INDUSTRIES	641	585	799	16						
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936	WEINGARTEN REALTY	979	822	857	13	704	WPL HOLDINGS	734	473	607	24						
	2600 Citadel Plaza Dr, Houston, TX 77008/713-866-6000						222 West Washington Ave, Madison, WI 53701/608-252-3311										
558	WEIS MARKETS	540	419	757	10	269	WRIGLEY (WM.) JR.	575	285	790	10						
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INDUSTRIAL POLICY

The very phrase rattles the teeth. It implies bureaucracy. It suggests government will pick winners and losers. Done badly, it would certainly hurt America. But with the cold war over and a global economy taking shape, America needs to shore up its competitiveness.

How? Certainly, by investing in education and infrastructure. But that's not enough. We must recharge the "knowledge base"—the basic science and technology that are the foundation of an advanced industrial society. Perhaps we should call it a growth policy.



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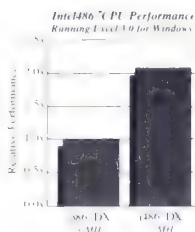


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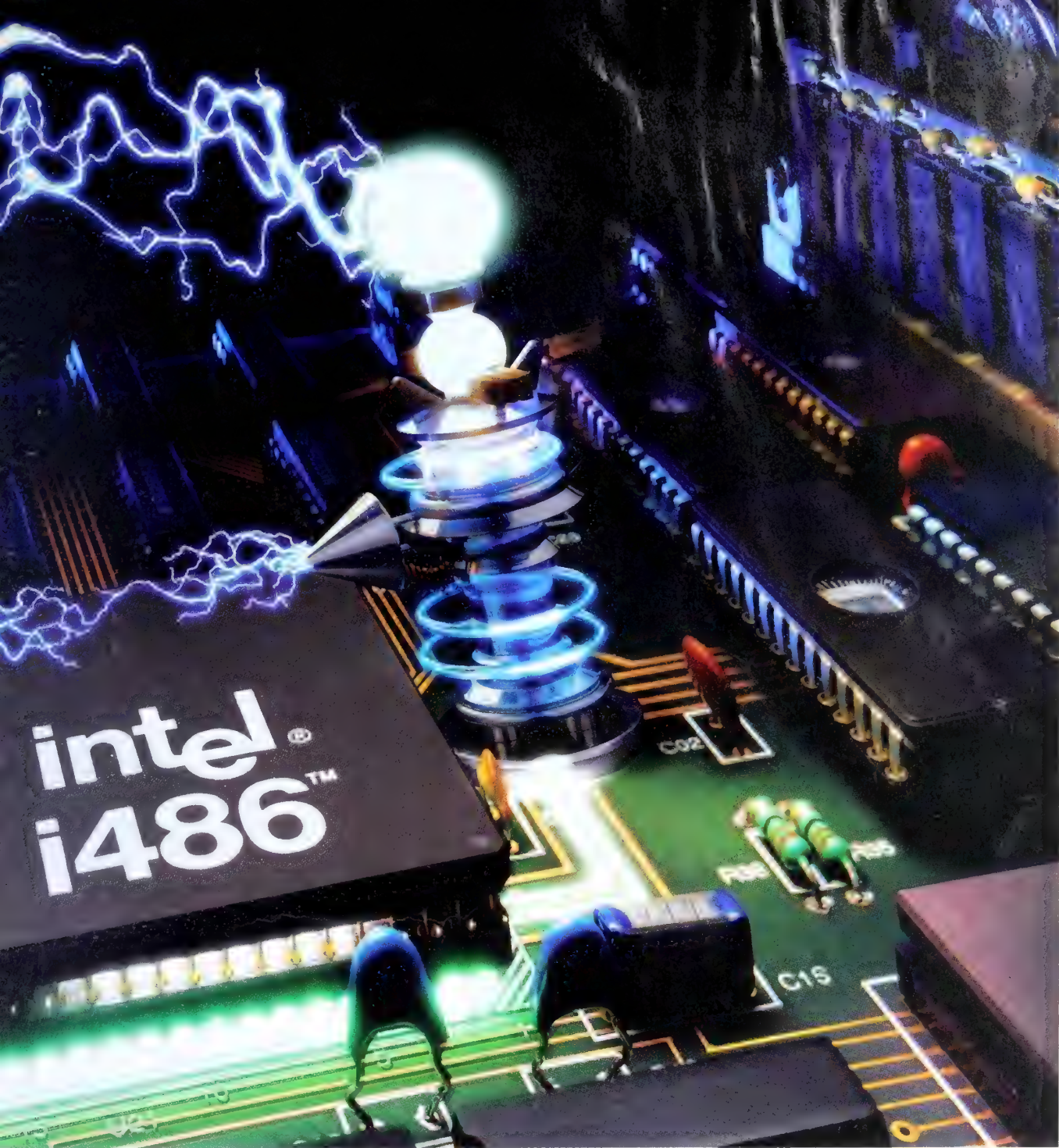
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AN INDUSTRIAL POLICY IS

NEEDED THAT BUILDS ON THE CORNERSTONE OF AMERICAN ECONOMIC GROWTH: INDIVIDUAL ACHIEVEMENT

Cover Story

70 INDUSTRIAL POLICY

Those two words are among the most contentious in Corporate America. But call it what you will, a plan to nurture growth is sorely needed to reverse two decades of dismal productivity. Not capital, not resources, but knowledge is the new king. To create that commodity and transform it into new technologies, a key player is needed: Government

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His Intel turnaround turned sour. Now he has to prove himself anew with Carter Hawley Hale and Revco

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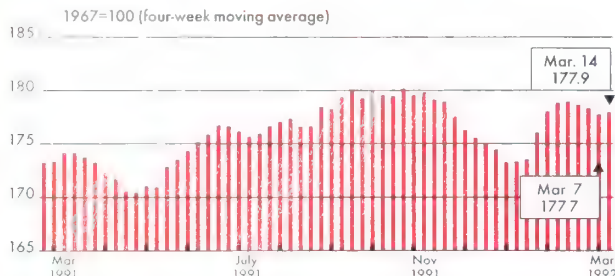
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Forging a growth policy for the U. S.
Big shareholders, do your homework

BusinessWeek Index

PRODUCTION

Change from last week: 0.1%
Change from last year: 2.2%

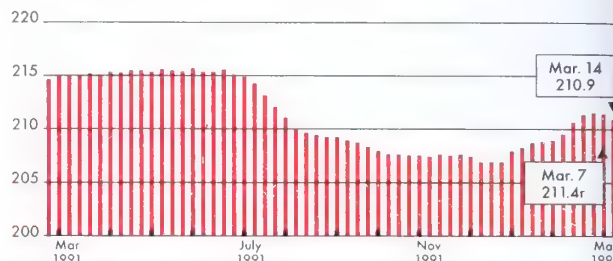


The production index increased slightly during the week ended Mar. 14. On a seasonally adjusted basis, output of trucks and electric power was up sharply, and crude-oil refining, coal, and lumber production increased as well. Steel, auto, paperboard, and paper production fell. Rail-freight traffic was unchanged from the week before. Prior to calculation of the four-week moving average, the index rose to 179.4, from 176.6.

BW production index copyright 1992 by McGraw-Hill Inc

LEADING

Change from last week: -0.2%
Change from last year: -1.9%



The leading index edged lower during the week ended Mar. 14, as a jump in the index in early February was removed from the moving average. In the latest week, fewer business failures and improvement in the growth rate of real estate loans offset lower stock prices and deterioration in the growth rates of M2 and materials prices. Bond yields were virtually unchanged. Before calculation of the four-week moving average, the index rose to 211, from 210.6 in the previous week.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (3/21) thous. of net tons	1,851	1,782#	14.5
AUTOS (3/21) units	112,520	109,346r#	3.5
TRUCKS (3/21) units	89,255	84,431r#	45.5
ELECTRIC POWER (3/21) millions of kilowatt-hours	53,938	54,163#	4.6
CRUDE-OIL REFINING (3/21) thous. of bbl./day	13,023	12,714#	2.3
COAL (3/14) thous. of net tons	19,057#	18,592	-5.2
PAPERBOARD (3/14) thous. of tons	794.7#	816.3r	3.9
PAPER (3/14) thous. of tons	764.0#	778.0r	5.2
LUMBER (3/14) millions of ft.	518.4#	520.4	4.5
RAIL FREIGHT (3/14) billions of ton-miles	20.7#	20.7	7.3

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWP, SFPA, Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (3/25)	133	132	140
GERMAN MARK (3/25)	1.65	1.65	1.72
BRITISH POUND (3/25)	1.73	1.73	1.73
FRENCH FRANC (3/25)	5.62	5.61	5.83
CANADIAN DOLLAR (3/25)	1.19	1.19	1.16
SWISS FRANC (3/25)	1.50	1.50	1.46
MEXICAN PESO (3/25)	3,054	3,047	2,980

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (3/25) \$/troy oz.	341.250	340.300	-3.6
STEEL SCRAP (3/24) #1 heavy, \$/ton	89.50	89.50	-12.3
FOODSTUFFS (3/23) index, 1967=100	204.8	201.2	-2.2
COPPER (3/21) ¢/lb.	105.8	106.1	-5.9
ALUMINUM (3/21) ¢/lb.	60.4	59.5	-12.3
WHEAT (3/21) #2 hard, \$/bu.	4.38	4.26	51.6
COTTON (3/21) strict low middling 1-1/16 in., ¢/lb.	51.70	50.50	-33.2

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (3/20) S&P 500	409.24	405.17	11.2
CORPORATE BOND YIELD, Aaa (3/20)	8.38%	8.34%	-6.6
INDUSTRIAL MATERIALS PRICES (3/20)	96.4	95.7	0.6
BUSINESS FAILURES (3/13)	465	480	14.8
REAL ESTATE LOANS (3/11) billions	\$406.6	\$401.8	-1.5
MONEY SUPPLY, M2 (3/9) billions	\$3,448.6	\$3,451.7r	2.1
INITIAL CLAIMS, UNEMPLOYMENT (3/7) thous.	433	460	-16.6

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusts data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
ORDERS FOR DURABLE GOODS: MFG. (Feb.) billions	\$120.5	\$120.6r	2.5
BUDGET SURPLUS OR DEFICIT (-) (Feb.) millions	-\$48,759	-\$15,650r	-86.2
HOUSING STARTS (Feb.) annual rate, thous.	1,304	1,190r	29.4
REAL GROSS WEEKLY PAY (Feb.)	\$258.77	\$255.60	1.4

Sources: Commerce Dept., Treasury Dept., BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (3/9)	\$939.2	\$935.0r	11.8
BANKS' BUSINESS LOANS (3/11)	289.8	290.8r	-10.1
FREE RESERVES (3/18)	322	847r	-62.9
NONFINANCIAL COMMERCIAL PAPER (3/11)	139.4	138.8	-4.8

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for a two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (3/24)	3.86%	4.14%	6.10%
PRIME (3/25)	6.50	6.50	9.00
COMMERCIAL PAPER 3-MONTH (3/24)	4.32	4.38	6.29
CERTIFICATES OF DEPOSIT 3-MONTH (3/25)	4.22	4.27	6.31
EURODOLLAR 3-MONTH (3/21)	4.30	4.28	6.35

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment.
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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Car Magazine, November, 1991

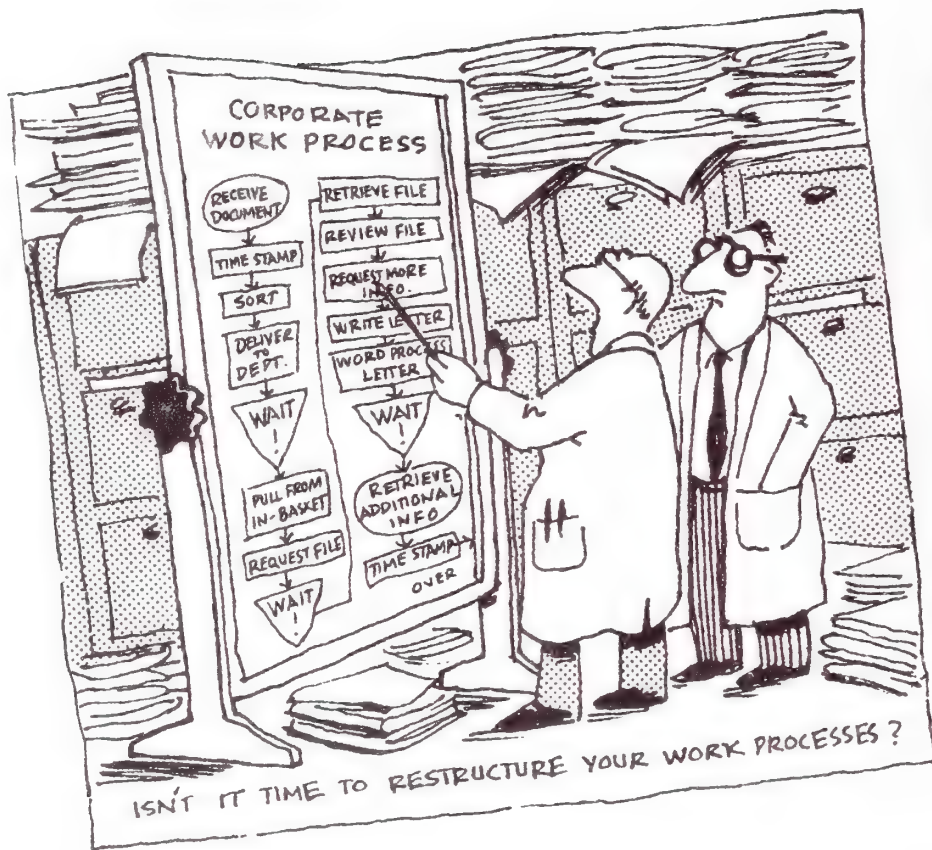
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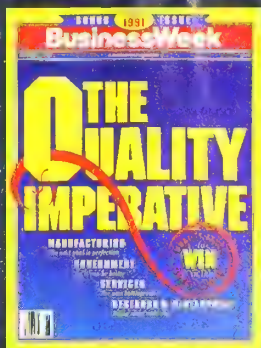
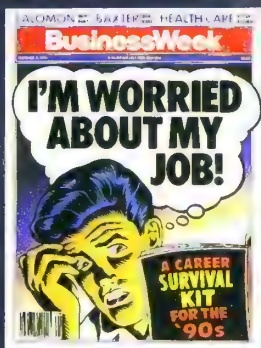
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FOR BUSINESS WEEK, A YEAR TO CELEBRATE



THE THREE ISSUES THAT WON BW THE GENERAL EXCELLENCE NOMINATION

Hollywood has its Oscars, and newspapers have their Pulitzer Prizes. In the world of magazines, the most prestigious honors are the National Magazine Awards. Like the Pulitzers, the National Magazine Awards are presented under the auspices of the Columbia University Graduate School of Journalism.

This year, I am very proud to report, BUSINESS WEEK has been nominated as a finalist in three separate categories. Ours is one of only 13 magazines that were nominated more than once. There were more entries than ever before: 1,270 entries from 298 different magazines.

We were selected as a finalist for general excellence among magazines with circulation over 1 million. We are represented in general excellence by the three issues shown above. Their cover stories—as well as those inside—typify the role we play every week in identifying and analyzing business news and trends—and setting the agenda for Corporate America.

The May 6 cover story "Are CEOs paid too much?" is a finalist in the public interest category. This story, by Senior Writer John A. Byrne, broke ground by exposing the growing gap between executive pay and worker pay, and between CEO pay and corporate performance. It galvanized the ongoing debate among shareholders and corporate directors

that is leading to reform by many U.S. companies.

The third category where we are a finalist is single-topic issue. Our entry is the Oct. 25 bonus issue "The Quality Imperative." This comprehensive package traces the quality movement's past, present, and future and lays down what it will take to win in the global economy. More than 100 BUSINESS WEEK reporters and editors contributed to the report. The issue set a BUSINESS WEEK record for U.S. newsstand sales for a single-copy seller. And we went to press for a second and third printing to satisfy demand from businesses, libraries, and educators.

The awards, sponsored by the American Society of Magazine Editors and the Magazine Publishers Assn., will be announced on Apr. 16. We are honored to be among the finalists in these important competitions. Yes, the selections are a nice pat on the back for our talented staff around the world. But more than that, they are further evidence of BUSINESS WEEK's commitment to quality journalism.

The real winner is you, the reader.

Stephen B. Shepard

Editor-in-chief

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OPERATING COSTS

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EPA REGULATIONS

INSURANCE

ADMINISTRATION

LICENSING

PERMITTING



FUEL
Costs

CAPITAL
CONSTRAINTS

OPERATING
COSTS

MAINTENANCE
COSTS

EQUIP-
MENT
INVESTMENT

DISSATISFIED
CUSTOMERS

DOWN-
TIME

MISSING
DELIVERIES

STOP

STOP



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Readers Report

CAT VS. THE UAW: SETTING THE RECORD STRAIGHT

The article "This brawl could cost CAT a couple of its lives" (The Workplace, Mar. 23), about the United Auto Workers' strike against Caterpillar, neglected three crucial points:

■ To date, the UAW continues to insist on an outdated practice from the 1950s—pattern bargaining—that has killed more than a few U.S. industries.

■ We believe Caterpillar's final offer to the UAW to be an extremely fair one for our employees (\$19 per hour, jobs guaranteed for six years, full health care and other benefits, and better retirement).

■ While the article questions whether the cost of the strike is more than the potential benefit, the real question is whether Caterpillar should confront this issue now. To wait for the next contract—in 1994—does nothing more than make a bad situation worse.

As of today, Caterpillar has presented three offers to the Auto Workers, each more generous than the last. The UAW did nothing to respond for nearly five months.

As for management's resolve, I assure you that it is sufficient to stay the course and get a labor agreement that will allow us to remain globally competitive from our U.S. base.

G. S. Flaherty
Group President
Caterpillar Inc.
Peoria, Ill.

'AN OASIS OF CIVILITY' AT THE GAP

The Gap's canny knack for spotting trends and providing quality merchandise at reasonable prices is just part of the story behind its success ("The Gap," Cover Story, Mar. 9). These stores also stand out as oases of order and civility in an often disorderly and uncivil world.

I recall one evening stopping to look into one of their windows after closing and observing a young employee meticulously arranging a row of sweaters so that the position of each one on the shelf exactly matched all the others—and I mean exactly.

Compare that—and their employees' customer-friendly deportment—to the "that's not my department" attitude too

often encountered in department store and you can see why The Gap is the store of the '90s.

William M. H. Hamme
New York

SWISS ARMY KNIVES AREN'T ONLY IN FORSCHNER'S POCKET

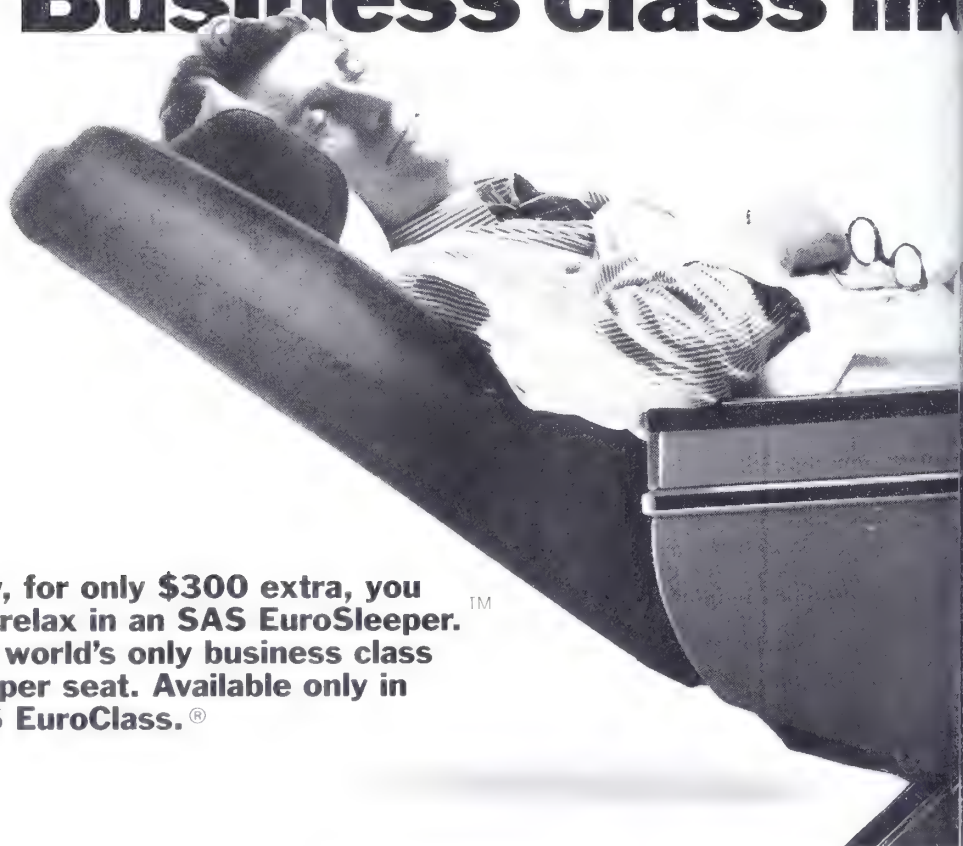
Your article "Atten-hut! It's the Swiss Army watch" (Inside Wall Street, Mar. 23) suggests that Forscher is the exclusive U.S. distributor for all Swiss Army knives.

The Forscher Group is the exclusive distributor in the U.S. of Swiss Army knives that are manufactured by Victorinox in Ibach, Switzerland. Precise International is the exclusive U.S. distributor for Swiss Army knives that are manufactured by Wenger in Delemont, Switzerland. Both Swiss companies have been official suppliers to the Swiss Army since 1908.

Both Forscher and Precise sell substantial quantities of Swiss Army knives in the U.S. through a wide array of retail outlets.

The article stated that "Kmart is expected to start carrying Swiss Army products this year." In fact, Kmart has

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John C. Bergeron

CEO

Precise International
Orangeburg, N. Y.

THE SPECULATION OF LLOYD RUBIN

I recently received articles related to my deceased husband, Lloyd S. Rubin, who died in Thailand on July 26, 1991. ("Lloyd Rubin: Wanted, especially by Finance, Jan. 27).

My husband's death was duly certified by a medical doctor and by the chief of police of the area. However, my husband continues to be an easy target of fictional speculation.

For example, Tomás Cabal, a writer and an ex-employee of my husband, states that my husband is alive and doing business in Costa Rica. I wish that the speculation were true.

BUSINESS WEEK reports that I "failed to persuade the U. S. consulate in Panama to stamp Rubin's will." I have never seen any will of my husband's, nor do I know if one exists, and therefore I never made any such request. My husband's death in Panama created a new type

of financing, and he hired and paid well more than 30 Panamanians.

Indirectly, this new service industry gave business to printers, hotels, contractors, accountants, translators, and attorneys, and provided new knowledge to our National Securities Commission.

BUSINESS WEEK says that I traveled with my husband to Thailand in June, 1991. In fact he traveled alone in March, 1991, and was under treatment in the rehabilitation center when I arrived in July. As for the investigation of his death, Reuters news agency reported from Thailand on Jan. 30 that "Thai police have investigated and cannot disprove the evidence of Mr. Rubin's death."

Perhaps now is the time to put an end to speculation about my husband.

Rachell Constante de Rubin
Panama City

Editor's note: The U. S. State Dept. still has not certified Lloyd Rubin's death. Because he was a U. S. citizen, such certification likely would be required before his heirs could collect any inheritance. According to a notation on Rubin's application to the Thramkrabog Rehabilitation Center (the site of his alleged death), he entered Thailand some time between May

29 and June 12 and entered the rehab center around June 20. On his application, he listed a Bangkok address for his wife. BUSINESS WEEK stands by its story.

THAT WAS NOT A CALL FOR OVERTHROWING THE GOVERNMENT

Regarding your story ("Putting the PC into politics," Information Processing, Mar. 16), this is to clarify that I have never, myself, advocated the overthrow of the federal government except by constitutional means, i.e., elections.

The items I was attempting to post (via electronic bulletin board) referred to groups under discussion on the Prodigy Close-Up Board, whose means to modify the current republic and Constitution don't appear to meet that standard.

Both I, my family, and persons in my former occupation in counterintelligence will appreciate this distinction being clear, as it may not be in your article.

Andy Ditzhazy
Farmington Hills, Mich.

Letters to the Editor should be sent to Readers Report, Business Week, 1221 Avenue of the Americas, New York, N. Y. 10020. Fax: (212) 512-4464, Telex: 12-7960, Intl. 4998204. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.

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SWOOSH: THE UNAUTHORIZED STORY OF NIKE AND THE MEN WHO PLAYED THERE

By J. B. Strasser and Laurie Becklund
Harcourt Brace Jovanovich • 682pp • \$24.95

HOW NIKE BLASTED OFF

Quick: What \$3 billion U.S. company once called its management retreats "buttface" meetings and smiled upon such executive pastimes as drinking, vomiting, and passing out?

Chairman Philip H. Knight may be the only one left at Nike who remembers those days. Many who helped him build the company into a world powerhouse have left. But their memories live on in this raucous history.

You won't find much grist for B-school case studies. Building on the connections of co-

author J. B. Strasser, wife of a former Nike exec, the book's tone is insidey and conversational. Its focus is on friendships and company folklore. At the first meeting with Nike, for instance, young Michael Jordan said what he wanted most for his endorsement was a car. Then there's Knight's initial reaction to the now ubiquitous checkmark logo: "I don't love it. But I think it will grow on me."

If *Swoosh* weren't 682 pages long, you'd want to take it on your next beach

vacation. But its main flaw hides in the word "unauthorized." Knight, Nike's "albino-looking" founder and still chairman, did not cooperate and remains a mystery man. Even friends who did talk seem to find him vague and indecisive, and his motives hard to read.

If the book has a message for others in business, it's not the obvious one: that fun and camaraderie go out when professional managers arrive, as gradually happened at Nike. Rather, it's Knight's ingenuity. He piggybacked off the success of a cheap Japanese brand, Tiger, which he distributed for six years. Then he launched Nike with a credit line from a Japanese trading company. In short, by imitating the imitators—Tiger was a knockoff of Adidas—he helped create a new industry.

BY DORI JONES YANG

TOMBSTONES: A LAWYER'S TALES FROM THE TAKEOVER DECADES

By Lawrence Lederman
Farrar, Straus & Giroux • 348pp • \$24

LAWYERED BUYOUTS

When attorney Lawrence Lederman left clubby Cravath, Swaine & Moore in 1974, his prospects were dim. The stock market was falling, and hardly anyone was doing deals—his specialty. But after a lengthy search, Lederman landed in what would soon become a hot mergers-and-acquisitions firm: nine-year-old Wachtell, Lipton, Rosen & Katz.

Tombstones—the title is slang for the announcements of completed deals—traces the 1980s' merger wave through

the backroom maneuvering of the lawyers and investment bankers who made billions off the raiders and their prey. Times, the triumphs Lederman recounts seem too effortless, and some of his stories lack either the passion or the skepticism that would have made them more compelling. Still, this is a well-written glimpse into many of the contests all the players that roiled U.S. business.

The book is as much social history as narrative. Lederman tells of Kohlberg Kravis & Roberts' early leveraged buyout of Houdaille Industries in 1978, the first time a firm borrowed more than the book value of a company's assets, and recounts William F. Farley's costly 1989 tender offer for West Point-Pepperell, which signaled both the slowdown in megadeals and the demise of Drexel Burnham Lambert Inc. Lederman seems nearly unhinged by the thrill of such transactions: "I found that all the mystery and excitement of sex, of breaking down resistance, of scoring and conquest, were associated with a takeover. Manliness was at stake, and measured."

But he also acknowledges the era's excesses, in part through the tale of his protégé, Ilan Reich. Reich was accused of insider trading in 1986, eventually pleaded guilty, was fined \$485,000, and sentenced to a year and a day in jail. The episode still haunts Wachtell Lipton, which split over whether to support him. Last year, Lederman left the firm amid controversy over the disclosures to made in *Tombstones* and joined a more traditional Wall Street law firm. Then, the business Establishment, which he returned had been forever altered by the takeover craze.

BY MICHELE GALLI

BY BUSINESS WEEK WRITERS

HOUSE OF CARDS: INSIDE THE TROUBLED EMPIRE OF AMERICAN EXPRESS

By Jon Friedman and John Meehan
Putnam's • 272pp • \$24.95

OVERDRAWN AT AMEX

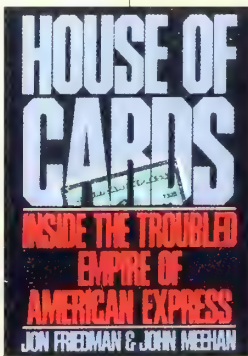
The real focus of *House of Cards* is American Express CEO James D. Robinson III—his meteoric rise and the erosion of his once-pristine reputation. Robinson, who didn't talk to the authors, is shown as an empire builder driven by vanity and ego. That led to a flawed strategy to create a financial-services powerhouse through acquisitions, write Jon Friedman, a former BUSINESS WEEK investment banking editor, and John Meehan, BUSINESS WEEK's banking editor. "In the end, AmEx was a collection of purchases and personalities, not a cohesive corporation," they conclude.

Image—Robinson's and the company's—came first. The book opens with Robinson losing his cool over a photo in a Boston paper showing a butcher knife stabbing an AmEx card. The story is about restaurants protesting AmEx's merchant fees. Robinson blasts two execs not only for letting the underlying problem fester, but also for jeopardizing the corporate image.

Other fly-on-the-wall accounts detail Robinson's shopping spree. Buying firms such as E. F. Hutton & Co. was a disastrous distraction, as were his battles with executives from acquired companies. Most damaging was his feud with Edmund Safra, head of Trade Development Bank. After Safra quit, AmEx operatives planted unsavory articles about him. AmEx later apolo-

gized and gave \$8 million to Safra's favorite charities. Robinson received stern warning from his directors. But the authors say, so many are Robinson loyalists that his tenure is assured.

Robinson's personal life also scrutinized. Eager to escape the shadow of his father, a prominent Atlantic City banker, Robinson came to New York and, using family connections and hard work, rose quickly at J. P. Morgan & Co., then won the helm of AmEx. After divorcing his first wife, he dated actresses, and his secretary before wedding public-relations dynamo Linda Gosden in 1984. They were the power couple of the moment. But by the '90s the authors note, the results of a decade of ill-fated acquisitions caught up with Robinson—and his image.



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AMERICA'S TRADE GAP ISN'T MADE IN JAPAN

BY ALAN S. BLINDER



Popular myth holds that Japanese restrictions contribute to our trade deficit, leading to unemployment. In fact, trade has little to do with the number of jobs, and all the fuss is little more than overheated rhetoric

It is better to give than to receive, the Bible tells us. I never thought the maxim applied to insults, but politicians in both the U.S. and Japan apparently do—and are indulging themselves with gusto. Perhaps this rhetoric would benefit from a few facts.

Some Japanese leaders blame America's trade problems on our overweight, underworked, illiterate workers. Is it true? Let's concede the waistline point; after all, where else in the world is dieting big business? And thoughtful Americans have long argued that the illiterate fraction of our work force is disgracefully high. But the laziness charge simply won't stick. We may not match Japanese standards of workaholicism, but Koreans probably feel the same way about the Japanese. This is all quite sensible. As societies prosper, one of the things they buy is more leisure. Compared with Europeans, Americans are real go-getters. And even the Japanese are lately discovering leisure as they grow richer.

On our side, Senator Ernest F. Hollings (D-S.C.) has raised the ante on tastelessness by touting the atomic bomb as an outstanding U.S. export to Japan! And what is Japan's alleged crime (in 1991, not 1941)? As one humorist observed, they have the audacity to sell us good cars at good prices. Why should that make us mad?

The answer, according to popular myth, is that Japanese trade restrictions contribute mightily to our trade deficit, which is, in turn, a major cause of U.S. unemployment. Unfortunately, the truth is that:

- Trade deficits do not cause unemployment.
- Our trade deficit is almost gone anyway.
- Our trade problems are not made in Japan.

Let us take up these points in turn.

Economists insist that trade deficits mainly influence the allocation of employment—whether more Americans build cars or make pharmaceuticals—not the total volume of employment. The logic is simple. Total employment depends roughly on gross domestic product. Since a country can have the same GDP with either a trade deficit or a surplus, its trade position must have little to do with its overall employment.

Convinced? I thought not; no one ever is. So consider these facts: During 1988 and 1989, the U.S. economy was as close to the elusive goal of full employment as it is likely to get. The unemployment rate averaged 5.4%, the lowest since the 1960s. Yet the current-account deficit, the most comprehensive measure of our trade imbalance, averaged 2.3% of GDP in those two years. Are we really to believe that, had our trade been balanced, 2.3%

more Americans would have held jobs than

And here's another fact that seems to have gone unnoticed: Our trade deficit has almost disappeared. The current-account deficit, which ran as high as \$160 billion in 1987, will probably come in near zero when 1991 data are complete. True, foreign payments for the Persian Gulf war make the 1991 accounts look misleadingly good. But the net-exports component of GDP, which reached -\$143 billion in 1987, was only -\$29 billion in 1991.

UNUSUAL YEAR? So why all the fuss over trade? The answer seems to be that America still has a \$66 billion deficit in merchandise trade, about two-thirds of which is with Japan. But Japan is just one country, and merchandise is just part of the picture. Today, the U.S. is roughly back to the historic norm of a decade ago—when our overall trade was in balance despite chronic deficits in merchandise. We balanced the accounts—both then and now—with surpluses in services and investment income. And we have run bilateral deficits with Japan for decades.

Yet political attention is riveted on U.S. Japanese trade. It is said that our bilateral deficit with Japan stubbornly refuses to shrink because their markets are closed. Is it true? The Japanese are surely no angels. The country seems both allergic to imports and skillful at warding off irritants. But few thoughtful observers attribute much of our bilateral deficit to Japanese import restrictions. After all, most of the deficit is in automobiles, not rice. We believe that a truly open Japan would be full of Chevys with left-handed drive?

Contrary to popular myth, America's bilateral deficit with Japan has danced almost lockstep with our overall merchandise deficit for two decades. Look at recent history. Our merchandise trade deficit with the entire world rose 138% from 1983 to 1987, and our bilateral deficit with Japan rose 171%. Then, as our overall deficit declined 32% from 1987 to 1990, our deficit with Japan declined 27%. Expressed as shares of U.S. GDP, the two deficits have near-perfect correlation.

Superficially, 1991 looks like a stark exception to the rule: The overall deficit fell sharply but the deficit with Japan did not. However, we should not make too much of a single year, especially when the ink is barely dry on the data. Simple statistical analysis suggests that 1990, not 1991, may have been the unusual year. Given our overall trade deficit with the world in 1990, our deficit with Japan was surprisingly small by historical standards.

So let's tone down the rhetoric on both sides. Too many strident voices are citing too many noncauses of nonproblems.

ALAN S. BLINDER IS THE GORDON S. RENTSCHLER MEMORIAL PROFESSOR OF ECONOMICS AT PRINCETON AND THE AUTHOR OF *GROWING TOGETHER*



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BY GENE KORETZ

BABY BOOMERS ARE JUST HITTING THEIR EARNINGS STRIDE

Americans are understandably depressed these days. Not only did the recent recession cut a wide swath through jobs and industries that were almost unscathed in previous downturns, but it also heightened awareness that the purported boom of the 1980s lifted average household incomes by just 10% in real terms. And it has raised fears that the 1990s could be even worse.

According to a new study by the Conference Board, such fears neglect a critical development: Demographic and so-

households headed by 45- to 55-year-olds—whose incomes run 34% above average—will explode by more than 40%, helping to boost average real household incomes by 15% during the decade.

A major role in this drama will be played by working women, whose full-time incomes have jumped from 60% of men's wages a decade ago to 72% today. Because young working men and women tend to put off marriage, household growth in the 1980s was dominated by young singles, and married households accounted for only a quarter of new households. But in the 1990s, as the last of the baby boomers wind up at the altar, husband-wife families will account for more than 60% of household growth—and will foster a surge in affluent two-income households (chart).

As for poorer households with incomes under \$15,000 (in 1991 dollars), they not only will decline in number but also will fall from 25% of total households to 22%, as millions of households move into middle-income and affluent brackets. "Just as demographic factors held down income growth in the 1980s," says Linden, "they will give it a powerful push in the years ahead."

MANDATED HEALTH INSURANCE COULD COST WORKERS PLENTY

Although most Americans are covered by employer-sponsored medical insurance, two-thirds of the 33 million uninsured people under age 65 are members of families headed by full-time workers whose employers (mostly small businesses) offer no such coverage. Thus, one popular scheme to solve the problem is to require all employers to provide basic health insurance. In a recent study, economists Jonathan Gruber of Harvard University and Alan Krueger of Princeton University calculate how such a requirement might affect wages of currently uninsured workers.

The study uses the impact of state workers' compensation programs on local wage levels as a proxy for the effect of mandated health insurance. Employers' workers' comp costs vary widely from state to state, depending on benefit levels that for specific injuries can run as much as six times higher in some states than in others. By comparing that variation in costs with state wage levels, the researchers are able to estimate the extent to which such costs are passed on to workers via lower wages.

In general, Gruber and Krueger find that some 85% of the costs of workers' compensation are shifted to workers via

lower pay. Considering the high costs of health insurance and the low wages earned by most uninsured workers, such an impact on their wages would be quite severe. And while workers earning close to the minimum wage would be protected from wage cuts, the study notes that more than 80% of uninsured workers earn more than the minimum.

WILL LOWER LAND PRICES SPOOK JAPANESE CONSUMERS?

Japan's economy actually contracted a bit last quarter, but most observers are still betting that the nation will avoid a true recession. Economists at Shearson Lehman Brothers Inc. are not so sure, however. They fear that falling land prices are exerting a powerful effect on the spending proclivities of Japanese consumers.

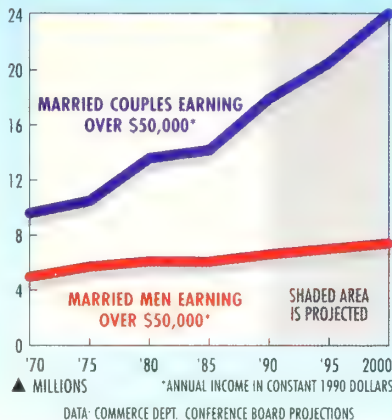
Land is by far the largest component of Japanese households' net worth, accounting for more than half of the assets held in the form of cash and deposits and 6% in direct stock-market holdings. With land prices down 10% in 1991 and another 10% so far this year, Japanese consumers appear to be retrenching. And if consumption actually falls as households try to rebuild lost wealth, warns Shearson Lehman, the risks of a real recession will grow.

WINTERTIME, AND THE SHOPPING WAS EASY

Was unusually mild weather responsible for the surprising surge in retail sales in January and February? Economist Michael Evans of Evans Economics Inc. has compared weather reports to recent assessments of retail activity in their regions by the 12 Federal Reserve banks around the nation.

According to national weather service data, winter temperatures were near normal in the Dallas and San Francisco regions, much above normal in the Minneapolis and Chicago regions, and somewhat above normal in all other regions. At the same time, the Fed banks' weakest retail sales reports for January and February came from the San Francisco and Dallas regions and the strongest from Minneapolis and Chicago, with the others in between. Evans' conclusion: "Recent sharp retail sales gains were due more to mild weather than a basic turnaround in spending."

MORE WORKING WIVES WILL BOLSTER INCOMES



cial trends that worked to hold down household incomes in the 1980s will shift dramatically in the 1990s, producing a far healthier rise in family incomes. This will happen even though economic growth is expected to slow from 2.6% a year in the 1980s to 2.3%.

Fostering this change will be the movement of the entire baby-boom generation into its peak earning years. In the 1980s, notes Conference Board consumer economist Fabian Linden, baby boomers were still crowding the ranks of young households with heads under age 35. However, in the 1990s, this group will shrink by 15%, while those in the 35-to-55 age bracket will surge by 27%, and older households will just keep pace with total households.

Although growth of total households will slow sharply to 10% from 15% in the 1980s, the slowdown will be concentrated among young households and senior citizens, whose average incomes are low. Households in their peak earning years will actually take off. Indeed,

'Nothing we can do can kill the thing off.'



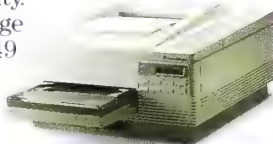
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DON'T LOSE TOO MUCH SLEEP OVER HIGHER RATES AND A STRONGER DOLLAR

Housing and exports are expected to play important roles in the U.S. recovery. Because of that, there is a growing concern that rising interest rates and a stronger dollar will sink the upturn's chances if it even sets sail. The argument is neat and sounds compelling. It's also probably wrong.

To be sure, fewer homes will be bought at 9% mortgage rates than at 8%. However, the real juice that will fuel the housing rebound is better growth in jobs and incomes that will make people feel confident enough to plunk down the money for such a major purchase. On that front, the latest readings on household incomes and consumer spirits look stronger.

Despite the uptick in rates in February, sales of exist- omes rose sharply. They jumped 9.3% in the month, an annual rate of 3.52 million. That was the largest monthly increase in nine years, which goes back to the first months of the recovery from the 1981-82 recession. The surge pushed resales to the highest level in three years. The rise in rates even may have contributed to the increase as buyers sensed that rates were bottoming out. Higher interest rates have also pushed up the dollar, which could make American goods more expensive in foreign markets. However, foreign demand has always been far less important to recovery than domestic demand, which is nine times larger.

Sides, the biggest threat to U.S. exports right now is the dollar. The rise in the trade-weighted dollar in recent months has been tiny. The real problem is the slowing economies of our industrial trading partners. Even there, surging demand in the developing nations is taking up some of the slack.

BY THE WAY
THE
DIT
MARKETS
ARE JUMPY

The domestic impact from the backup in long-term interest rates is the more worrisome issue. It threatens further gains in housing and other credit-sensitive goods, which retards balance-sheet repair for debt-laden households and businesses. After inflation is subtracted, the rise in real rates is especially troubling (chart). The rate on 30-year Treasury bonds rose back to 8.1% in mid-March, from 7.4% only two months ago. And the yield for 30-year mortgages averaged 9.1% in the week of Mar. 20, up from a 17-year low of 8.3% in mid-January. Far, though, the rise in long rates is not out of line

with the upticks that have typically occurred at the onset of past recoveries. Rates are generally back to where they were last October, when the economy was showing signs of slipping back into recession. However, the recovery petered out last year because jobs and incomes failed to grow, not because of high long-term rates.

Long rates have been climbing for two reasons. First, after the robust-looking economic data in recent weeks, the credit markets are not yet convinced that the recovery will be modest enough to hold down inflation. Also, traders continue to worry about the river of Treasury debt that will be raging through the markets later this year, because of the widening federal budget deficit.

The Treasury's red ink in February was \$48.8 billion, nearly double that for February, 1991. So far in the 1992 fiscal year, which began in October, outlays are rising as revenues fail to grow (chart).

The 1992 deficit is likely to come in below the \$400 billion projected by the Administration's Office of Management & Budget, but not much below.

And new government projections show deficits as far as the eye can see—into the next millennium. All this imposes potential inflationary pressures from government policy that the credit markets cannot ignore.

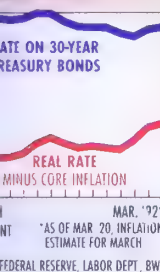
Since market rates comprise real rates plus expected inflation, it's clear from the upward tilt of market rates minus current inflation that the credit markets are not yet convinced that inflation will stay down. The rate on 30-year Treasuries minus core inflation has climbed to a three-year high. Core inflation, which excludes price swings in energy and food, has fallen to the lowest yearly rate in more than eight years.

A BOND RALLY MAY BE BREWING

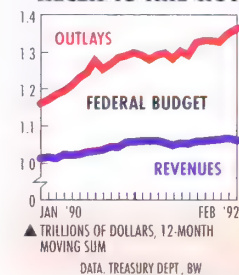
In the near term, the inflation indicators should remain favorable. That means traders may be in for a change in sentiment that will allow market rates to ease back a little, or at least stop rising. That's particularly true if the data continue to signal that the recovery will be subpar by the standards of past upturns.

Indeed, bond yields have retreated from their mid-March highs partly in response to the latest tepid-looking numbers on car sales and new factory orders. By Mar. 25, the yield on 30-year Treasuries had slipped to just over 7.9%. That was the same day the government

REAL RATES ARE REAL CONCERN



OUTLAYS ARE UP, RECEIPTS ARE NOT



Business Outlook

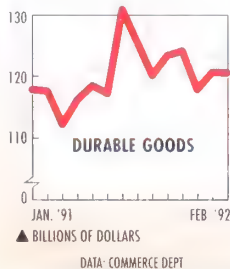
reported that new orders for durable goods dipped 0.1% in February, to \$120.5 billion (chart). The news wasn't all bad, though. Excluding a big drop in military demand, orders rose 1.3%, and factory shipments jumped 2.9%.

However, the backlog of unfilled orders fell in February, a sign that factories may not yet have enough work to start calling back laid-off employees. Auto-industry orders rose in February, but sales of U.S.-made cars slipped in mid-March to an annual rate of 5.8 million, down from 6 million in early March.

THE SLUMP ABROAD MAY HIT HOME

Another concern about rising long-term interest rates is the upward pressure they place on the U.S. dollar. But the shift in the dollar isn't the only factor in this year's uninspiring outlook for foreign trade. Weak foreign economies will hold back export growth, and a U.S. recovery means increased demand for imports here.

FACTORY ORDERS REMAIN TEPID



Exports also declined in January, by 1%. It was their third consecutive loss, and the falloff was fairly widespread among the major export categories. Still, the drop reflected soft export prices as much as it did a decline in volume, which fell by 0.5%. The question is whether the recent runup in the dollar's value will put pressure on U.S. exporters to raise their prices abroad.

There is not much muscle behind the dollar's new

strength, however. True, the foreign exchange value of the dollar vs. the currencies of America's major trading partners has risen by about 6% since the beginning of 1992. But the dollar is back only to where it stood in October. And the greenback still has a long way to go before it reaches its recent peak, hit in mid-1989 (chart).

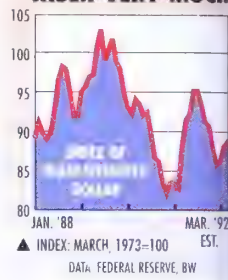
The U.S. currency is likely to strengthen some more in coming weeks, especially if foreign central banks cut interest rates in response to their respective nations' economic slumps. In fact, the slowdowns in other economies, in particular Japan and Europe, are much more worrisome for U.S. exports than the dollar's value.

Although less-developed countries, such as those in Latin America and on the Pacific Rim, have accounted for all of the growth in exports over the past year, the bulk of U.S. goods is still shipped to the industrialized nations. The fourth-quarter decline in the Japanese economy and the continued rise in unemployment in Europe are signs that demand from two of the U.S.'s biggest markets will weaken this year.

Demand from nontraditional markets will help exports to grow this year, although at a fairly moderate pace. But with the U.S. economy on the mend, imports will also increase, after falling 1.4% in 1991. These upward trends in exports and imports suggest that the trade deficit will make little, if any, headway this year.

Last year, without improvement in foreign trade, real gross domestic product would have fallen instead of edging higher. But this year, trade will not play such a pivotal role—regardless of the dollar's rise. Moreover, the weak outlook for trade is another reason why the recovery will be subdued, and a modest upturn will keep upward pressure off inflation and interest rates.

THE DOLLAR HASN'T RISEN VERY MUCH



THE WEEK AHEAD

NEW SINGLE-FAMILY HOME SALES

Monday, Mar. 30, 10 a.m.

New homes probably sold at an annual rate of about 630,000 in February, say economists surveyed by McGraw-Hill Inc.'s MMS International. If so, that would be the fastest selling pace since December, 1989. Home sales increased by nearly 13% in January, to 612,000, as lower mortgage rates made home ownership more affordable.

LEADING INDICATORS

Tuesday, Mar. 31, 8:30 a.m.

The government's composite index of leading indicators likely increased by 0.8% in February, on top of a 0.9% jump in January. That's indicated by gains in

the factory workweek, building permits, consumer expectations, and money-supply growth in February.

HAPM SURVEY

Wednesday, Apr. 1, 10 a.m.

The National Association of Purchasing Management's index of business activity likely advanced to 53.4% in March, its highest reading in six months. The index stood at 52.4% in February.

CONSTRUCTION SPENDING

Wednesday, Apr. 1, 10 a.m.

The MMS consensus expects that outlays for building projects probably jumped by 1% in February, after rising 1.3% in January. Most of the gain was in residential construction.

FACTORY INVENTORIES

Thursday, Apr. 2, 10 a.m.

Manufacturing inventories likely fell 0.2% in February. A large increase in factory output suggests manufacturers dipped into their warehouses again. January, inventories shrank by 0.4%.

EMPLOYMENT

Friday, Apr. 3, 8:30 a.m.

The MMS economists are cautiously forecasting a 60,000 gain in nonfarm payrolls in March, after a 164,000 increase in February. However, because signs of a rebound are drawing people back in the labor markets, the March unemployment rate is likely to remain at February's high 7.3%.



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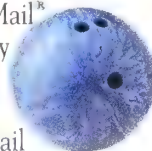


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THE REICHMANNS START DEALING

AS CREDITORS CLOSE IN, CANARY WHARF MAY BECOME A BARGAINING CHIP

Canary Wharf, the massive office development in London's dilapidated docklands, has been a huge gamble ever since it was a glint in the eyes of Paul Reichmann, the Toronto mogul with the world's largest private real estate empire. He believed the project would assure London's preeminence as a financial capital.

Like his other landmarks, including New York City's World Financial Center and Toronto's First Canadian Place, Canary Wharf was more than a building complex, it was a vision. But it quickly became a financial sinkhole, draining strength from his sprawling empire, Olympia & York Developments Ltd.

O&Y picked a bad time to invest \$3 billion in the 71-acre development: Vacancy rates are still as high as 40%, and attempts to attract tenants are at a standstill as London suffers its worst property slump in 45 years.

Meanwhile, lending has dried up just as O&Y was preparing to seek financing.

The turmoil at O&Y is the clearest evidence so far of the depth of the worldwide real estate slump. By now, markets are used to seeing real estate tycoons in trouble. As the 1980s wound down and the likes of Donald Trump, Peter Kalikow, and Trammell Crow took sudden tumbles, the markets bent, but didn't break. But the Reichmanns dwarf every other player in the real estate game, and the crisis at O&Y caught the attention of central bankers in London, Ottawa, and Washington.

CULTURE SHOCK. Now, the Reichmanns are on unfamiliar ground with their bankers. Instead of relying mainly on their reputation as shrewd investors, they must reveal what is for them an unprecedented amount of financial data. As a result, the Old World culture at O&Y that rested on handshakes and Paul Reichmann's word of honor will be profoundly changed.

Going into the restructuring talks, the

Reichmanns are betting that Canary Wharf can save them. A prominent banker familiar with the negotiation has told BUSINESS WEEK that the Reichmanns hope to use the London office complex as their main bargaining chip. Specifically, O&Y hopes to persuade scores of bankers to accept equity in Canary Wharf or use it as collateral. In return, the banks would cough up new loans to help the Reichmanns meet their obligations and finish Canary Wharf, which is only one-third done.

It's the opening gambit in what could emerge as the biggest corporate debt restructuring in history. The Reichmanns are eager to soothe anxious bankers from Toronto to Tokyo who have lent O&Y upwards of \$15 billion. And that doesn't include millions of dollars worth of other obligations, such as currency and interest rate swaps. One banker describes O&Y's swap portfolio as "sizable."

No one knows whether O&Y's creditors, including the Royal Bank of Canada,



PAUL REICHMANN:
SCRAMBLING TO AVOID
A HUGE RESTRUCTURING

HOW TIME RAN OUT FOR O&Y

JAN. 16 Rift between O&Y and Morgan Stanley hits the papers. A few days later, Paul Reichmann admits publicly that "cash flow is much worse than it was two years ago"

FEB. 14 Some O&Y commercial paper and other debt downgraded

MAR. 6 The Reichmanns retire roughly half of the \$800 million worth of O&Y's paper

MAR. 18 O&Y cancels public financing plan for Canary Wharf after British government nixes tax breaks

MAR. 19 The Reichmanns say they'll redeem the remainder of O&Y paper and agree to sell Exchange Tower, a Toronto office building, for \$250 million

MAR. 22 O&Y announces plan to restructure its enormous debt, which totals more than \$15 billion in loans from 100 banks

MAR. 24 Thomas Johnson, former president of Manufacturers Hanover, is named O&Y's president. Chairman Paul Reichmann will devote himself entirely to Canary Wharf

DATA BW

Citibank, and Barclays, will buy in to the Reichmann solution. But they may have a little choice. Canary Wharf is the Reichmanns' biggest asset bearing the debt. Moreover, if bankers foreclosed on O&Y, they would probably end up owning the project anyway. It may come down to a question of who finishes Canary Wharf, the Reichmanns or the banks.

Problems have dogged O&Y for the last two years. With property values falling and vacancy rates soaring in all major markets, O&Y's once formidable balance sheet has sagged. As a result, O&Y's commercial paper on Feb. 27 was downgraded, despite carrying first-lien guarantees. That made it harder for the company to roll over its short-term obligations (table). On Mar. 6, O&Y retired roughly half its \$800 million outstanding commercial paper.

FIGHTERS. At roughly the same time, O&Y executives began to meet privately with officials at the Bank of Canada and Bank of England. The central banks were said to have expressed concern about a potential panic in world markets if O&Y couldn't raise enough cash to service its debt. Within a week, the company began notifying banks that they would need debt relief. Most were not surprised. "As soon as they had problems with their commercial paper, they began scrambling," says a banker.

To soothe its lenders, O&Y is doing the unthinkable: In mid-March it started turning its balance sheet to scrutiny. And now, the Reichmanns have been remarkably successful at keeping their company under wraps in spite of its problems. It includes \$20 billion worth of assets on its balance sheet as well as \$2.8 billion in other assets. "It was clear that there was a need to share more information

with the banks than the Reichmanns had in the past," says a banker.

To further enhance the company's credibility, O&Y has put together a formidable team to work out a strategy with the banks. On Mar. 24, O&Y named former Manufacturers Hanover President Thomas S. Johnson as president. Johnson, who left Manny Hanny before it merged with Chemical Banking Corp., is the first person who isn't a member of the Reichmann family to hold the position. His mere presence signals a sea change in O&Y's style of doing business.

Despite the unprecedented disclosure, one banker says the Reichmanns want to avoid renegotiating terms on most of O&Y's existing loans. The majority of the

outstanding credits are well-collateralized, O&Y insists.

That leaves a giant question mark over Canary Wharf, which could eventually cost \$6 billion. Few bankers are eager to force the Reichmanns into bankruptcy with stringent demands. The Royal Bank of Canada and Canadian Imperial Bank of Commerce, which is leading the negotiations with the Reichmanns, are each said to have up to \$800 million of O&Y loans. Citicorp, O&Y's biggest lender outside Canada, has a nearly \$500 million exposure.

For these and other banks, buying into the Reichmanns' dreams for Canary Wharf is risky. The most recent test of Canary Wharf's appeal to investors proved catastrophic. In early March, a British court ruled that O&Y had to buy back Morgan Stanley & Co.'s office tower at Canary Wharf for \$240 million. O&Y had been counting on Morgan to arrange outside financing for the transaction. Morgan's try collapsed when a Japanese pension fund pulled out. The Reichmanns also had planned to raise \$370 million by selling one of the buildings to individual investors in the form of a tax-free trust. O&Y canceled the scheme when Britain lopped off the tax breaks in its 1992 budget proposal.

With so many uncertainties surrounding Canary Wharf, bankers may not be eager to sign on to O&Y's plan. Most of O&Y's creditors are still just beginning to understand the company's overall balance sheet. Still, bankers don't have a lot of time. With an empire this size, the stakes are much higher than O&Y's future. Many of the world's bankers are counting on a speedy resolution.

By John Meehan in New York, with Mark Maremont in London, Thane Peterson in Toronto, and bureau reports

The Reichmanns have made secrecy a trademark, but to soothe angst among their banks, they must open the books

CANARY WHARF: ONLY
THIRD COMPLETED
60% VACANT



RICHARD BAYES/ATZ/SABA

THE HIGH-TECH BRAWL OVER FREE TRADE

Bush is caught between makers of computers and screens

President Bush loves the idea of linking the economies of the U.S., Mexico, and Canada into a North American free-trade zone. And he detests the notion of the government picking winners and losers among industries. But to the White House's dismay, the two concepts are becoming inextricably linked as free-trade negotiations teeter toward conclusion.

The White House is now being asked to settle a dispute between big U.S. computer companies and the struggling American manufacturers of flat-panel displays for laptop computers—the hottest segment of the market. Computer makers want the pact to guarantee their freedom to assemble machines in Mexico and then import them to the U.S. duty-free. Fine, say the display makers, just as long as the finished machines contain enough North American parts. But if the Mexicans build computers almost entirely out of components that originated in Asia, the screenmakers contend, their industry—and ultimately all U.S. computer making—will be imperiled.

SNIPING. The Treasury and Commerce Depts. have taken up the U.S. screen industry's cause, even though, White House sources say, Chief Economist Michael J. Boskin has been warning of a "politically and economically foolish attempt at industrial policy." The result: sniping among Administration officials and confusion at the negotiating table. Meanwhile, computer companies such as IBM, Apple, and Hewlett-Packard, once staunch backers of a free-trade pact, are threatening to withdraw support.

But others see an inexorable hollowing of the U.S. computer industry. "U.S. computer makers can't become competitive by depending on their competitors—they are going to fly their plane right into the ground before they realize this," warns James M. Hurd, president of tiny Planar Systems Inc., a domestic screen manufacturer.

In fact, U.S. computer giants already have largely rejected American screenmakers' lagging technology in favor of

that produced by sophisticated Japanese suppliers. IBM joined Toshiba in a 50-50 venture to make laptop screens in Japan. Compaq Computer, Dell, and AST Research are relying on Sharp's flat-panel screens. And Apple Computer is buying from Hosiden Electronics. That U.S. computer makers would trust their future to powerful, fiercely competitive electronics companies in Japan strikes more than a few observers as impru-



dent. "You'd think that U.S. systems makers would want to foster a domestic infrastructure to support productivity and innovation and have independent sources of supply," reasons Eric I. Garfinkel, a former Assistant Commerce Secretary.

Only the Japanese can supply the next generation of color, high-resolution screens, reply U.S. computer makers. Japanese companies invested \$2 billion

in research and development during 1991 to perfect the devilishly complex process of making active-matrix liquid-crystal displays. Besides, the computer makers point out, they are already required to pay a 62% duty on the import of such screens, although they can avoid the duty by building their computers abroad. Furthermore, "the purpose of the free-trade agreement ought to be to liberalize trade, not to erect new barriers," argues Richard Lehman, IBM's director on trade and investment.

TIME LIMIT. So far, no one is backing down. Computer makers threaten to withdraw support for the free-trade agreement, saying the rules protecting U.S. jobs are too stringent. That would only win votes among legislators worried that the pact isn't tough enough. Some in the Administration figure. If the industry withdraws support, "I'll call a press conference for the president. I'll hand out their press release," promises a senior Administration trade official.

Time may be running out for the U.S. screenmakers. Sophisticated displays appear prominently on everyone's top-10 list of "critical technologies" for the future. But American computer manufacturers say they can't afford to wait for the U.S. industry to catch up. American screenmakers complain that they don't have enough orders to justify the huge investment required to step up output. And the Administration is moving like a glacier. Investment by Commerce and Defense in flat-panel technology is measured in tens of millions, while the cost of building a single plant to build active-matrix liquid-crystal displays runs from \$200 million to \$400 million.

Even trade officials agree that the free-trade talks are a clumsy way to settle a technology-policy dispute. But the effort may nevertheless prove worth the trouble if only the White House learns something about the potential and the rationale for government help in high-technology research and development.

So far, it has mostly been Congress earmarking what little funds are available for favored screenmaking projects. Many have now come to believe that is past time for the White House to cast aside its priggish standards about the role of government in the economy and consider why it has been compiling those critical technology lists in the first place.

By Paul Magnusson in Washington

NO ONE IS LAUGHING AT 'GOVERNOR MOONBEAM' NOW



No, he's an Aries. Hear the current lineup for Brown's Cabinet? Linda Stastdt for Minister of Culture, Teresa for Secretary of Health and Human Services. Will Brown hold a summit meeting with Russian President Boris Yeltsin? No, the two will do a Vulcan mind-meld.

Because of his governor "Moonbeam" image, the glibness of Brown puts on seems endless. So is Brown's capacity to confound the establishment. At Democratic headquarters, party leaders are not laughing when they contemplate the possibility that Brown's assaults on runner Bill Clinton may hurt the chances of unseating President Bush.

The "spoiler" label is an injustice to Brown, whose upset victory in the Mar. 24 Connecticut primary set Clinton up for potentially more profound embarrassment in New York on Apr. 12. In fact, Brown is a spoiler, not a

day Savonarola, a monastic zeal whose promise to put a torch to a corrupt political system" mirrors vot-er-bellucose mood this year.

As a messenger, Brown strains credibility. He has undergone more political transformations than Woody Allen's character. He started out in California politics as an ascetic New-Age guy. He railed against nuclear power, agricultural growers, passed up Governor's limo for a plain Plymouth, and took pilgrimages to Zen meditation centers—but he governed by fully nurturing ties to labor and traditional party blocs. Washed out of the statehouse by California's

conservative wave, Brown reemerged in 1989 as state party chairman and cheerfully hit up business for the special-interest dollars he now abhors.

VOLUNTEER ARMY. His latest political incarnation may seem unlikely, but Brown is using it to win converts. He has won primaries or caucuses in Connecticut, Colorado, and Nevada, run a strong second in Maine and Michigan, and could win again in Vermont on Mar. 31 and Wisconsin on Apr. 7. Polls show him tied with Clinton in California, whose June 2 primary ends the nominating season.

Moreover, by continually bashing

Brown's characterization of Democrats and Republicans as united in a money-grubbing elite is exaggerated, campaign finance is a scandal and does force lawmakers to spend most of their waking hours wheedling contributions from organized interests. Asked about this, Clinton mumbles platitudes about imposing modest campaign-spending limits and making free air time available to challengers. Brown counters that Clinton seems an unlikely reformer, since the Arkansan's campaign is heavily underwritten by \$1,000 contributions from Wall Street lawyers and investment bankers (page 83).

And Brown has discovered that most voters don't cast their ballots because they are bowled over by an 86-page economic tract. Thanks to savvy research done by polling guru Patrick Cadell, Brown has focused his energy on bashing the irredeemable corruption of Democratic and Republican incumbents. In 1984, Gary Hart nearly toppled Walter F. Mondale with this approach. Brown, a far more supple politician, is following the same blueprint.

Relying on the politics of resentment, Brown has put together an odd coalition of liberals, environmentalists, alienated blue-collar workers, and

radical-chic elements of Jesse Jackson's Rainbow Coalition. The pastiche has hung together despite Brown's calls for a nakedly regressive 13% flat tax, an idea that sets hearts pounding with glee at the conservative Heritage Foundation.

No, Brown doesn't stand to win the nomination this way. But should a new scandal sink Clinton, the party elders Brown reviles will have to yank the prize away from him. That would split the Democratic Party wide open, fuel a new burst of anti-Establishment cynicism—and pave the way for a future crusader to rally the voters against those dug-in dinosaurs in Washington.



Brown has undergone more political transformations than Woody Allen's Zelig

Clinton over ethics, his Arkansas record, and a slippery switch from Southern good ol' boy to traditional Democrat, Brown is beginning to inflict real damage: Connecticut exit polls found that 46% of Democratic voters question Clinton's character. The assault is preventing Clinton from training his guns on George Bush. "People know Brown is a charlatan," says pollster Irwin J. Harrison. "But they believe that the political system is bought and paid for, and Clinton is part of the system."

Politics aside, there are also substantive reasons why pols should start taking Brown more seriously. The first is the potency of his message. Although

'THIS HAS TO BE BORLAND'S WORST NIGHTMARE'

It's showdown time as Microsoft invades its data-base turf

The "barbarian" of the personal-computer software biz. That's how Borland International Inc. sees itself—tough, lean, aggressive, anything but conventional. Now, we'll see how barbaric Borland can be.

On Mar. 24, Microsoft Corp. threw a flaming spear at the heart of Borland's business. Microsoft said it will acquire Fox Software Inc. for about \$173 million in Microsoft stock. A \$45 million company, Fox is by no means elephantine, but

software, made it the undisputed king of PC programs used to keep tabs on everything from personnel files to inventory records.

Borland Chairman Philippe Kahn has never faced such a foe in his core business. "Of course I'm worried. How can you not be about anything the richest guy in America wants to do?" Kahn says, referring to Microsoft's billionaire Chairman William H. Gates. But Kahn already knew that his Redmond (Wash.)

he's betting, will appeal to two different sets of customers. Cirrus, which relies on graphic symbols for ease of use, should lure first-time data-base users. FoxPro is for those wedded to dBASE technology. It's no coincidence that Borland courts the same two groups of software buyers. "This has to be Borland's worst nightmare," says analyst Bruce Lyter of Montgomery Securities.

If so, it may be Microsoft's dream. FoxPro, a dBASE clone, zips through data faster than its progenitor, some viewers say. As such, it could appeal to the 3 million dBASE users. Swaying them over to FoxPro so far has not been easy. Says Fox President David L. Fulton, "We just haven't had the resources."

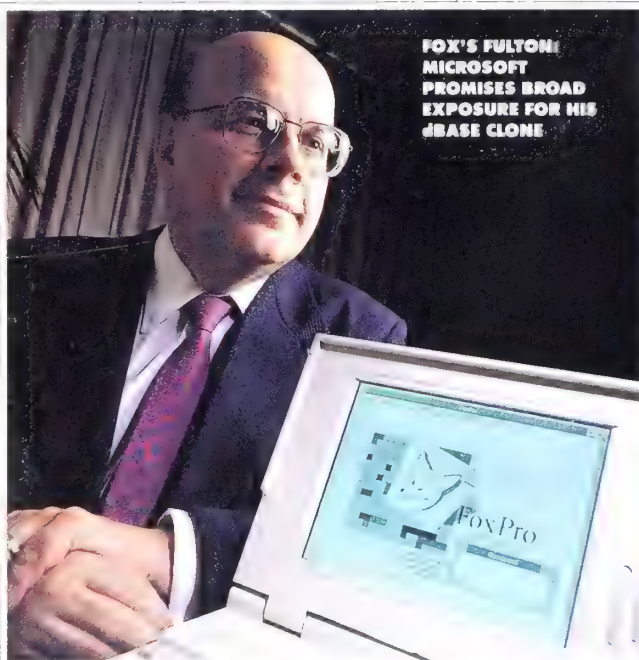
EXODUS. Now, Fulton's squadron is part of the world's biggest software outfit. Microsoft promises a broad marketing and distribution effort. It's unclear how

many of Fox's 250 people will move to the Seattle area, but its 21 software developers are already packing. Ditto for Fulton, 47, a former computer science professor who co-founded Fox in 1983 in his Perryburg (Ohio) living room with Richard G. LaValley, an attorney who put up half the initial \$100,000 seed money. The two stand to reap \$5 million each in Microsoft stock. And Fulton can't wait to get started as Microsoft's so-called data-base architect. "This is like giving a kid the biggest electric train he could get," he says.

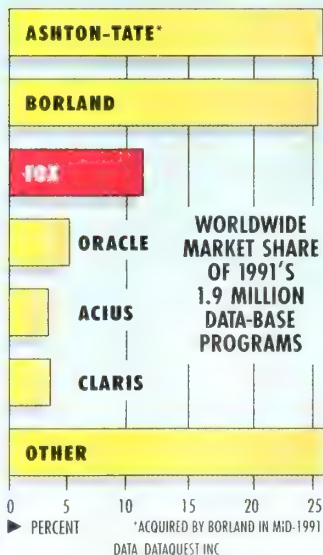
The deal is not a total surprise. For three years, there have been courtships between the two companies. But this past October, talk grew serious after one of the lawsuits was lifted—namely, a threatening lawsuit against Fox. The suit, which was filed in 1988 by Ashton-Tate, claimed Fox illegally copied dBASE features. The irony: After Borland acquired Ashton-Tate, it dropped the suit under pressure from the Justice Dept. And it promised not to file a similar one for 10 years.

Without that legal sword, Borland was free to rely on aggressive development, marketing, and pricing. But Kahn has been through skirmishes with Microsoft before and says he is prepared for the upcoming biggie. "We don't intend to give up anything," he declares. "Our company will tighten its belt and make sure we're leaner and meaner." Who would expect anything less from a true barbarian?

By Kathy Rebello in San Francisco



MICROSOFT BUYS A MARKET FORCE



it is the No. 2 supplier of PC data-base software behind Borland (chart). The deal, Microsoft's largest to date, would create a formidable challenge by combining Microsoft's deep pockets and market power with Fox's much-praised programs. Says analyst Bruce M. Lupatkin of Hambrecht & Quist Inc.: "This is a direct threat to the Borland dominance." The day the news broke, Borland's stock sank 10%, to 63.

GOBBLING AWAY. So, Borland will have to fight to keep its crown. Today, Borland controls about 50% of the \$600 million PC data-base market—in large part through an acquisition of its own. Last year, it snapped up Ashton-Tate Co., the maker of the industry-leading dBASE, in a \$439 million stock swap. That, along with Borland's own successful Paradox

rival had designs on data bases. By late 1992, Microsoft plans to make its own grand entrance with a homegrown package, code-named Cirrus, 2½ years in the making.

With Fox in hand, Microsoft can begin gobbling up market share even sooner. Within a year or so, analysts say, Microsoft could garner as much as 25%. And Gates seems to be counting on it. "I'd be very disappointed if we were anywhere close to only 10%" of the data-base market, he says. "Very, very disappointed."

And Gates hates to be let down. Fox hopes to keep Gates happy by introducing in July new versions of its FoxPro package, including one for Microsoft's hot-selling Windows graphics programs for computers running its MS-DOS software. The tandem of Cirrus and FoxPro,



BUILD TO SUIT: CEO BERGER CUSTOM-DESIGNED THE COMPANY TO APPEAL TO INVESTORS

ME BIOTECH BABIES E JUST BORN LUCKY

D is benefiting from brilliant marketing—but can it deliver?

Company has no products available for sale and does not expect to have any products commercially available for many years, if at all.

ARIAD Pharmaceuticals Inc., private placement memorandum, Jan. 22, 1992

surely not the first biotech company to try to raise money with an unproven technology and no products in hand. But even in this high-risk, high-stakes field, the leap of faith that a startup called ARIAD is asking investors to make is enormous. Soon, the Cambridge (Mass.) company will announce that it has successfully completed a private placement raising \$46 million. That would make it the largest startup deal in

the company's history. Not too long ago, a company like ARIAD's headquarters in Cambridge, Mass., would consist of a few cubicles and two-by-four frames in a gutted building. Today, biotech startups emerge from the shadows of incubators and venture capitalists, parading out money and drabs. ARIAD is no ordinary startup. "I don't know what the characteristics would be of a company that

would be a big success," says CEO Harvey J. Berger. Less than a year ago, he and a savvy group of co-founders custom-designed the company to win investors' hearts. They packaged a sexy new technology called signal transduction, well-known names on the advisory board, and experienced management.

STRANGE BEHAVIOR. It was the right recipe. The deal was oversubscribed, and Berger says he could have raised \$10 million to \$20 million more. But he couldn't keep controversy out of the mix. Some biotech executives and venture capitalists say ARIAD is no further along than a handful of competitors pursuing more focused research in the same field. And they worry that if ARIAD frit-

ters away its huge cash hoard, all of biotech could get a bad name. "This is distressing for people who are trying to build real companies," says Joshua Boger, CEO of the drug design company Vertex Pharmaceuticals.

Berger & Co. would argue that they are building a real company—they're just cutting down the construction time. Over a year ago, Kevin Kinsella and Lawrence A. Bock of the La Jolla (Calif.) venture-capital firm Avalon Ventures saw that scientists were making progress in unraveling what's sometimes called the black box, the interior of the cell where the messages that control its destiny and behavior are transmitted (diagram). Drugs typically work at the cell surface level, but what they trigger inside has been a mystery. It's one reason drug developers have trouble controlling side effects.

Avalon decided that signal transduction, the science of controlling those cellular signals, was ripe for commercialization. Meanwhile, Berger, a respected R&D chief at Centocor Inc., an established biotech company in Malvern, Pa., was itching to start his own company. Berger agreed with Avalon that a company could use signal transduction to design drugs that zeroed in on disease-causing signals and disrupted them without side effects.

The previous year, Berger had watched New York investor David Blech raise a then-record \$33 million to start Icos, a Seattle company focused on inflammatory disease. Although he didn't know Blech, Berger knew that he, too, wanted to put together a big deal. After a series of meetings, Berger, Avalon, and Blech decided to join forces, with Blech agreeing to foot the bills until they could pull off a mega-funding deal. As the popularity of biotechnology stocks last year soared, it just "made us more ambitious," Blech says.

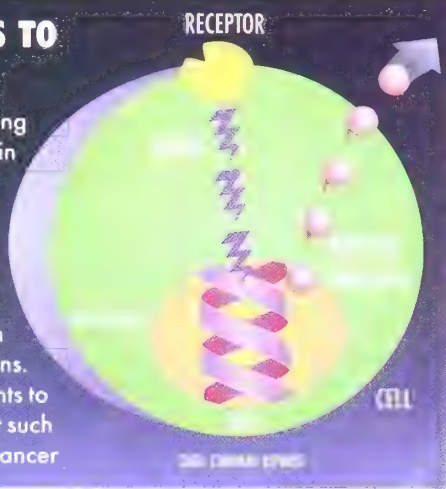
Bock and Kinsella met with more than 300 scientists to scope out the field. Berger began recruiting scientists and executives from Centocor and else-

where. By January, the company had lined up a dozen licensing deals with universities and persuaded 20 well-known scientists, including Nobel laureates David Baltimore and George E. Palade, to join an advisory board. Berger scored his greatest coup in enlisting Joan S. Brugge, one of the world's most respected investigators in signal transduction, to be scientific director.

But things happen

WHERE ARIAD PLANS TO SPEND \$46 MILLION

The biotech startup is researching 'signal transduction' and 'protein trafficking' to gain insight into how to develop novel drugs. Here's how that works: When a cell interacts with an outside agent, such as a virus, a signal travels to the cell's DNA, which may respond by making proteins. That causes disease. ARIAD wants to short-circuit this process to fight such illnesses as cystic fibrosis and cancer



fast in biotech. As Brugge admits, the "signal transduction field is changing daily." And today's leading researcher can be tomorrow's flat-earthier. And there's no certainty a company can harness its new findings to make safe and effective drugs.

That's why it's tough to figure why the company deserves a valuation so much higher than other startups. Although Berger insists ARIAD will "dominate the field," its technology is at a very early stage—and it has plenty of competition already. At least three other young companies, Tularik, Sugan, and Sphynx Pharmaceuticals, are working in aspects of this field. Soon, the biotech company ImClone will announce it's spinning off a subsidiary called Cadus to do the same. And both Sphynx and Cadus are further along: Cadus has a patent and 20 preliminary drug candidates. Sphynx will test its first drug on people this summer.

BIG DEALS. Investors and fans of the deal say they are betting on the all-star cast and that by giving them a war chest they can concentrate on building a business instead of fund-raising. "I think Harvey Berger is a money-maker," says analyst Peter Drake of Vector Securities International. Amerindo Investments is confident enough in the strategy to buy in. Amerindo fund analyst Sarah L. Gordon notes that the \$2-a-share placement likely is "a lot cheaper than participating in the IPO" somewhere down the line.

But it's fair to ask how many great chefs the broth needs at this stage: Scientists have strong egos, and that can make for conflict. One of Icos' key founders quit abruptly just months after that company's private placement. Says Samuel D. Waxsal, CEO of rival ImClone: "If [the scientific board] has real power, they'll all try to force programs they care about," imperiling the company's focus. Boger chides that a big advisory board is "a prescription for total chaos." Retorts Blech: "It will take just one major lead from one of these eminent people to pay off in spades."

ARIAD's financial coup will undoubtedly prompt other ambitious deals. Avalon is already working with Blech on another. But are the investors in these financings making their decision based on the company's long-term potential? Not entirely. They're also betting that the company will go public in a few years. If ARIAD goes public within a year or two, as it hopes to do, and the market's appetite for biotech is still keen, ground-floor investors figure to make a bundle—even if there are still no products in sight.

By Joan O'C. Hamilton in San Francisco and Geoffrey Smith in Boston

DEALS

PAINTING A NEW FACE ON REVLO

Debt is down, and it's going public. But can it find the old magic?

Married three times and a notorious philanderer, Charles Revson never got along with women. But he sure knew how to sell to them. For decades, Revson's Revlon Inc. was the last word in beauty.

But by 1985, Revson was long gone, his successor, Michel Bergerac, was a flop, and raider Ronald O. Perelman had taken over. Perelman, who knows more about leverage than lipstick, loaded a horrifying \$2.9 billion in debt onto the company's balance sheet. Wall Street watched with morbid fascination as Revlon flirted with default. And while the cigar-waving financier and

How did Perelman pull it off? Partly by selling assets. Among them: M Factor, acquired in 1986, and Beatrice, which Perelman bought in 1989. Both were sold to Procter & Gamble Co. for \$1.2 billion last year—double what Perelman paid. The financier also siphoned off some of the take from initial public offerings of stock in other companies. About 75% of the \$48 million raised last summer in the stock sale of comic-book giant Marvel Entertainment Group, known for its *Spider-Man* and *The Incredible Hulk*, went into Revlon's coffers. And 10% of the \$83 million



PERELMAN'S MAKEOVER FOR REVLO

	1989	1991
	BILLIONS OF DOLLARS	
SALES	\$2.44	\$1.80
OPERATING PROFIT	0.17	0.18
LONG-TERM DEBT	2.94	0.75
MARKET CAPITALIZATION	NA	2.6*

*As of Mar. 24, 1992 **Estimated, after stock sale

DATA: COMPANY REPORTS, BW

socialite wrestled with his credit tab, Revlon's glamour faded.

Now, it looks as if this Fifth Avenue fable may have a happy ending. Revlon's debt is under control. Innovation has begun again. And the company has its target customer firmly in sight. Indeed, while Revson's magic is missing, his empire is largely intact.

HOT ISSUE. Perelman's endgame is set to start in two months, when Revlon hopes to sell stock to the public. Revlon has yet to announce the offering, but Perelman aims to peddle 15% to 18% of his wholly owned concern, raising \$400 million to \$600 million in fresh capital. Much of that will go to pay off borrowings. To date, he has whittled debt down to \$750 million, less than a quarter of its peak three years ago (table). "That's not bad work," boasts his chief lieutenant, Howard Gittis.

raised with Coleman Co., the camping equipment maker, went to Revlon.

Odds are that Revlon's stock sale will be one of the hot issues of the year. Cash flow now comfortably covers interest payments. Meanwhile, the IPO market keeps roaring, and Perelman has a hot hand: Since it went public in February, Coleman is up 14%, to 29. Marvel has tripled, to 30, since its IPO last July.

Wall Street may be happy, but Perelman has yet to prove he can cut it up in town. So far, his performance as a makeup marketer has been mixed. Soon after taking control of Revlon, Perelman allowed the company's managers to divert it from the mass market toward the prestige department-store business. To support the redirection, Perelman bought Germaine Monteil, among others. However, Revlon had trouble competing against seasoned and popular

le lines such as Estée Lauder and
l.
ile Revlon floundered at the high
f the market, the cosmetics busi-
ness got tougher. Interna-
tional juggernauts, such

What's responsible for
dy's shiny locks? Not necessarily
t, Revlon's flagship shampoo,
ch has been repackaged and
mulated twice in the past few
rs. Competitors have cashed in
the confusion, cutting Flex's
cket share, though sales have
ounded lately

stle's Cosmair, Procter & Gamble,
nilever, now dominate with multi-
ands. And the ideal cosmetics cus-
s—young women—have turned
department stores to mass-market
s such as supermarkets, drug-
, and Wal-Mart Stores Inc.

ely, the job of persuading those
n to use Revlon—probably their
rs' brand—has fallen to Jerry W.
Levin, former director of
mergers and acquisitions at

Though Revlon will market
o and Jean Klatt, among other
ness, you likely won't smell them
ndy. Cutbacks in advertising and
ation have kept these taller lines
growing

ury Co. and onetime chairman of
ury's Burger King and Haagen-
units. "Levin knows how to bring
ting profits up but doesn't talk
product introductions and image-
ing," says Allan R. Mottus, a
tics-industry consultant. Levin is
But Revlon says Perelman is hap-
py with his president of

Glamour is everything.
since 1989 Revlon has been
ing on supermodel Cindy
ward to add luster to its
s. Revlon's ad spending is
a jump to \$200 million
year, from 1991's
50 million

months. "Jerry Levin has sur-
ed himself with cosmetics
onsumer-products profession-
says a spokesman. "He does
pect to be regarded as the
Charles Revson."
metics retailers give
a high marks for
to boost Revlon's
tising spending



by 25% this year, to \$200 million. Revlon's campaigns badly need an over-
haul, says Suzanne Grayson, a Santa
Barbara (Calif.) marketing consultant
who headed Revlon marketing under
Revson. "They really don't support their
brands," she says.

Consider the "Unforgettable Woman"
campaign. These ads, featuring such ce-
lebrities as Oprah Winfrey, Audrey Hep-
burn, and Nancy Sinatra, were
meant to boost the Revlon

Skin
Cindy's flawless complexion
isn't just nature's endowment. She
could be using Almay, Revlon's entry
in the superhot hypo-allergenic skin
cream category. It outsells Procter &
Gamble's Clarion and other drugstore
brands. Revlon also is wooing pink-
collar women by selling its tony
Ultima II line at J.C. Penney

name, not to promote any specific prod-
uct. A mistake, it turns out: Women re-
spond to ads that stress a particular
makeup. And many of the celebrities
proved too old to appeal to Revlon's tar-
get audience. Newer Revlon ads feature
supermodels Claudia Schiffer, 21, and
Cindy Crawford, 26, newly married to
Hollywood's Richard Gere.

The fresh ads may already be helping.
Market share inched up in 1991. And in
one crucial arena, Revlon is the market
leader: the lipstick, eye shadow, and nail
polish sold in drugstores. "Revlon is still
a very powerful name with the consumer,"
says Carol Robinson, a vice-presi-
dent at Youngstown-based Phar-Mor of
Ohio Inc., a 291-store drugstore chain.

Revlon has even improved
new-product develop-

Nails
Cindy's nails are coated
with Revlon's best-selling polish, which
holds 29% of the drugstore market.
The color? Looks like Cherries-in-the-
Snow, a classic founder Charles Rev-
son introduced in 1953

ment—a decided weakness since
Revson's departure. The Nakeds, a two-
year-old part of the Ultima II line, is
selling well to teens. And cosmetics buy-
ers have given new products, including
Velvet Touch lipsticks and Impulse mas-
caras high marks. Revlon's newest try is
Essentials, "environmentally correct"
makeup a la The Body Shop's line.

The inspirational genius that dreamed
up Cherries in the Snow, a 1950s Revson
color, is gone. But less red on Revlon's
balance sheet suggests that the change
in raider-turned-manager Perelman may
be more than cosmetic.

By Larry Light and Laura Zinn in
New York

'I GUESS THE PRICE OF SALT WATER IS GOING UP'

Implant makers are hiking prices following the Dow Corning uproar

Cristin Sanborn figures her new breasts were a bargain. In early March, after reading frightening headlines about silicone-gel implants, the 29-year-old Los Angeles hotel renovator decided to have hers removed. Her doctor replaced the three-year-old gel sacs with saltwater implants. Now, Sanborn figures she was smart to act when she did, even though, at \$950 a pair, the sacs cost \$400 more than in December. Next year the implants could run \$1,500 or more—if they're still on the market.

Indeed, Dow Corning Corp.'s Mar. 19 announcement that it would quit the breast-implant business altogether leaves just two small outfits selling the devices to U.S. plastic surgeons. Unhin-

a newspaper, and you can see that the cost of doing business is up," says Jan Varner, president of McGhan, a Santa Barbara-based subsidiary of California medical-products maker Inamed Corp. Mentor, another Santa Barbara company, will say only that the pricing on its products reflects the high cost of selling breast implants. While neither will break out implant revenues, analysts figure each company sold \$20 million to \$30 million worth of the devices last year.

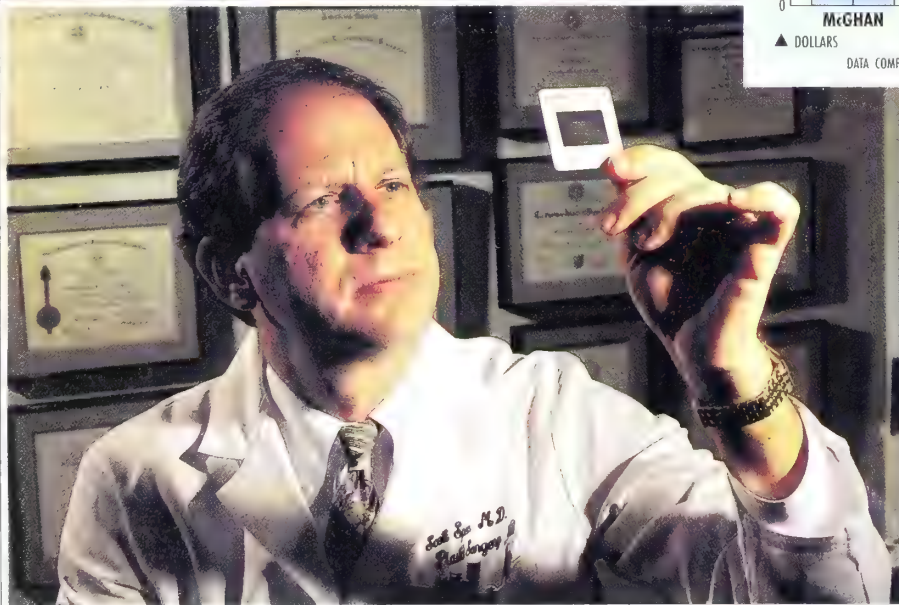
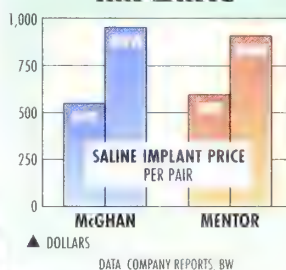
To many women's advocates, the price hikes

water types as part of his review of other implants, including pumps used in heart surgery and penile and testicular devices made of silicone. To prepare, companies selling such products are undertaking elaborate—and costly—new studies.

The implant companies say those bills will have to be paid by the consumer. Besides, says Oppenheimer & Co. analyst Glenn Reicin, the companies' unit costs will soon rise, since the demand for breast implants is expected to drop dramatically. Today, Mentor and McGhan are hard put to keep up with orders, particularly among women who want their silicone sacs replaced with the s-

line alternative. But over time, women who want larger breasts for cosmetic reasons—who have made up perhaps 80% of the \$90 million market—may shun implants. "That demand has basically disappeared," reports Dr. Scott L. Spear, Georgetown University Medical Center professor and practicing plastic surgeon.

COSTLIER BREAST IMPLANTS



GEORGETOWN'S SPEAR: DEMAND FOR COSMETIC IMPLANTS "HAS BASICALLY DISAPPEARED"

dered by big-time competitors, both have suddenly and dramatically raised prices on their saline-based products. Since January, when the Food & Drug Administration imposed a moratorium on silicone-gel implants, Mentor Corp. and McGhan Medical Corp. have imposed 50% hikes on their saline alternatives. And more hikes are coming, executives at the two companies say.

HIGHER COSTS. Behind the price surge, Mentor and McGhan maintain, is a fear of increased litigation and the cost of preparing new research to meet regulators' demands. "You just have to pick up

are little more than greed. "I guess the price of salt water is going up," says Sybil Niden Goldrich, co-founder of Los Angeles-based Command Trust Network, which distributes information about implants. She argues that today's patients are being forced to shoulder the cost of past mistakes with the much-embattled gel devices. "They're gouging," she says.

Yet there's no question that government regulators are beginning to question data about the safety of saline implants. FDA Commissioner David A. Kessler has said he will review the salt-

Women have good reason to be wary of even the saline sacs. Surgeons report that as many as 1 in 5 of the sacs made before 1985 will burst or leak after being in place for five years. And even the newer, sturdier versions can blow out during rigorous activity. While seeping sterilized saltwater isn't anywhere near as harmful as silicone gel, new surgery is required to replace the implant. And the devices can interfere with cancer diagnosing mammograms. What's more, many plastic surgeons believe there may be undetected risks to the implants, noting that scientific data are scarce. "I'm not sure any of us knows the story yet," says Dr. Norman Anderson, an internist and FDA adviser at Johns Hopkins University.

Still, there are many women who insist that they have a right to breast implants. Kessler is set to rule on a FDA panel's recommendation that implants be widely available to women, as long as they are closely monitored. No matter what Kessler decides, however, he is sure to take a lot of heat. "Prohibition has never been shown to work in this country, and women will demand access to these products," says Dr. V. Grant Stevens, a plastic surgeon from Marina del Rey, Calif. Probably so, but they will be paying lots more for them.

By Joseph Weber in Philadelphia, with bureau reports



BIRDS: FRANCE COULD REFUSE TO LET PLANES UNLOAD OR MAKE THEM FLY HOME EMPTY

FRANCE WANTS TO GIVE AMERICAN PLANES THE GATE

...over increased competition, it seeks to limit U.S. flight capacity

April in Paris spells romance, and U.S. airlines hope that Americans will forget the recession and fly off for some French-style fun. Carriers plan to boost capacity to meet this spring and summer by a fat 30%. Already, cheap fares beckon. But dig out your *plan de Paris* just as France is fighting to make that trip easier to make.

Over about the increased competition for Air France, the French are demanding sharp cutbacks in the number of U.S. carriers make available for the season, which begins on Apr. 1. Proposed increases are far larger than past jumps in demand, the French say, and will drive fares down. U.S. carriers say the demand is there. Emergency talks were deadlocked in mid-March, and both sides agree that they're headed for a crisis. "It's a very, very bad situation," says Arnold J. Newman, vice-president for international marketing at American Airlines Inc.

The situation could get worse. Negotiations between the two sides are scheduled to meet again on Mar. 30. The French say what they'll do has no resolution is in sight. However, officials at the Transportation Dept. note that if

U.S. carriers don't back down, France could refuse to let carriers unload. Or, it could make them fly home empty. The U.S. could do the same to Air France. Such action requires White House approval, but a Transportation official says: "I think it has the potential to get there." Even compromise could stir more trouble. Industry officials say the situation sets a bad precedent for other countries seeking changes in bilateral pacts.

LOSING SHARE. Tensions have been building for some time. An industrywide shakeout has eliminated the weakest American carriers, leaving the major U.S. airlines more efficient and financially stronger than many of their state-owned European rivals. The result: loss of market share for the Europeans. Since 1980, Air France's share of the U.S.-to-France passenger market has

dropped to 30% from 50%. So when U.S. carriers unveiled plans to beef up service, France demanded 20% cuts instead.

As justification, a French government official calls planned 37% increases in capacity way too high compared with optimistic projections of a 12% increase in demand. "The Americans seem to pay no attention to supply and demand," he says. "Inevitably this means fares would fall." But there's more at issue. Privately, the French claim American competitors want to hog market share at the expense of profit. And they believe U.S. carriers may be rushing to grab a European foothold for fear the European Community will shut the window when it takes over regulatory control in 1993.

France is asking the Transportation Dept. to join it in jawboning the U.S. airlines. And "if we don't make the cuts, the French will," says a Transportation official. The French even drew up a document outlining reductions they'd like from several U.S. carriers (table).

NO RIGHT. But there's little chance that Washington will join the French call for cuts. Says Transportation Secretary Andrew H. Card: "We expect France to live up to our bilateral agreements." U.S. officials note that the proposed increases are in line with a capacity accord worked out with the French in 1990. And while the French say the treaty lets them seek cuts if added capacity would disrupt their own services, U.S. officials say the French have no right to block service on routes already agreed to.

U.S. carriers are hardly inclined to back down. United Airlines Inc., for one, agrees that building strength in Europe is one reason for adding capacity. But U.S. carriers believe Air France is just unhappy about eroding share. American's Grossman says his airline has long sent nearly full planes from the U.S. to Paris. He adds: "We are not dumping."

The issue is doubly vexing for the precedent it could set. Germany, for one, wants to curb U.S. expansion by limiting each side to no more than 60% of combined two-way traffic, though it shows no sign of canceling bilateral pacts. But Giovanni Bisignani, Alitalia's

CEO and head of the Association of European Airlines, warns that if the French dispute is not solved bilaterally, "some [European] carriers may push for a common accord." It looks like more turbulence ahead.

By Seth Payne in Washington, Andrea Rothman in New York, and Stewart Toy in Paris, with bureau reports

HARDBALL A LA FRANCAISE

To get U.S. carriers to cut summer capacity by about 20%, France wants:

AMERICAN	To forgo a second daily flight from Chicago to Paris
DELTA	To drop plans for a nonstop Orlando-Paris flight, scheduled to begin June 4, and for continuing service from Paris to Geneva
NORTHWEST	To reduce seating available on flights from Boston to Paris
TWA	To reduce available seats by 7% on flights from New York, Boston, Washington, St. Louis, and Los Angeles
UNITED	To reduce overall seating by 20% on flights from Washington, Chicago, Los Angeles, and San Francisco

DATA: BW

WHAT DO SEARS, NADER, FRITO-LAY, AND BUSH HAVE IN COMMON?

They want to deregulate in-state trucking. The Teamsters say no way

When Procter & Gamble Co. needs to restock Tide on supermarket shelves in San Antonio, it has two choices: The company can truck in the detergent from its plant in Dallas, 270 miles away—or haul it from Alexandria, La., 302 miles away. P&G's pick? Alexandria. The company saves \$129—26% of the haul's total cost—by shipping across state lines and avoiding intrastate rates. "It was much more economical to ship interstate than from a base in Texas," says Richard A. French, a P&G transportation manager.

Texas is hardly the only state where that's going on. Similar pricing distortions exist in the 42 states that regulate in-state trucking. The idea is to protect local truckers that promise to serve unpopular rural routes. But regulation also fixes route rates—many of them sky-high. So some shipping giants, such as paper-goods producer Georgia-Pacific Corp., have set up their own private fleets in states where rates are inflated. W. Bruce Allen, a professor at the Wharton School of Finance, estimates that logistical gymnastics used to

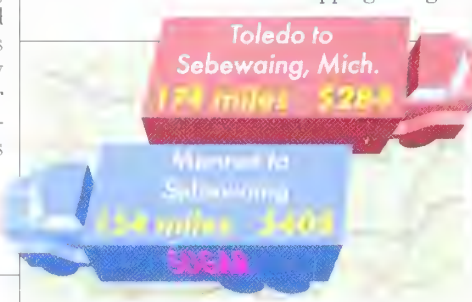
Washington think tank. All of them believe that deregulation would save billions. "The status quo keeps consumer prices artificially inflated," complains Public Citizen attorney Cornish Hitchcock. State regulations "are outmoded and don't make sense." CSE estimates that ending intrastate regulation could



save \$87 billion over a five-year period.

Yet despite its broad backing, the bill won't pass without a bruising fight. The Teamsters, fearing hotter competition that could cost its members jobs, vow to block the measure. The union will enjoy support from the National Association of Regulatory Utility Commissioners, whose members oversee intrastate trucking. They argue that without regulation, truckers will just abandon rural areas. "It's only because states impose rural service obligations that the service continues to be provided," says Tom Myers, Illinois' chief trucking regulator. Opponents counter that interstate deregulation didn't harm such service—in fact, says the Transportation Dept., which backs deregulation, it saved shippers and consumers \$38 billion a year.

The Teamsters have reason to worry. Since Congress pared back federal rules for interstate trucking in 1980, the Interstate Commerce Commission says the number of carriers has jumped 143%, to more than 50,000, many of them non-union. Yet the cost of shipping freight



by truck tumbled from 5.7% of gross national product in 1980 to 4.9% in 1990, according to the Eno Foundation, a Washington transportation research group. Increased competition put inefficient companies out of business, cutting Teamsters ranks by 25%, to 1.5 million.

The battle against deregulation is nothing new to the Teamsters. Lawmakers ended both federal and state regulation of air, rail, and bus service nationwide a decade ago but got only half the job done on trucking. Former Nevada Senator Howard W. Cannon, a Teamsters supporter and then-chairman of the Commerce Committee, struck a deal in 1980 with the Carter Administration. Federal regulation got the ax, but state rules escaped. Later, after the Teamsters endorsed Ronald Reagan, deregulation zealots spared the intrastate loophole.

BIG PUNCH. Times have changed though, boosting prospects for reform. The European Community is set to regulate cross-border trucking, and supporters of U.S. legislation argue that Washington must follow suit to keep American goods competitive. "We have enough challenges in the world for competition," says John Ficker, trucking specialist at Weyerhaeuser Co., which supports the Packard bill. "We don't have to shoot ourselves in the foot."

The legislation could get even more impetus if it is packaged with a measure to overturn a 1990 Supreme Court decision. The ruling invalidated a raft of cu-



avoid intrastate tariffs cost an estimated \$3 billion annually in fuel consumption and paperwork.

Now, Congress is considering putting the brakes on state rules. "Overregulation is choking American industry," Representative Ron Packard (R-Calif.) declared at a Mar. 24 hearing on trucking regulation. A measure he has introduced to end state trucking regulation boasts the support of one of the more unlikely coalitions in Washington, Americans for Safe & Competitive Trucking. Its members include major corporations such as Sears Roebuck and Frito-Lay; Ralph Nader's liberal litigation group Public Citizen; and supply-side economists at Citizens for a Sound Economy (CSE), a

rate trucking contracts that were negotiated years ago. Under the decision, trustees for bankrupt trucking companies now can bill their old customers for the difference between discount fees they negotiated and the higher charges the trucking companies had previously filed with the ICC. The agency estimates shippers could get socked with \$27 billion in charges unless the back-billing rule is outlawed.

Hearings before the House surface transportation subcommittee are scheduled to wrap up soon, and the measure could be put to a vote by summer. Until then, the bill's supporters will have to travel a long, bumpy road.

By Elizabeth Lesly in Washington



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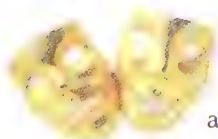
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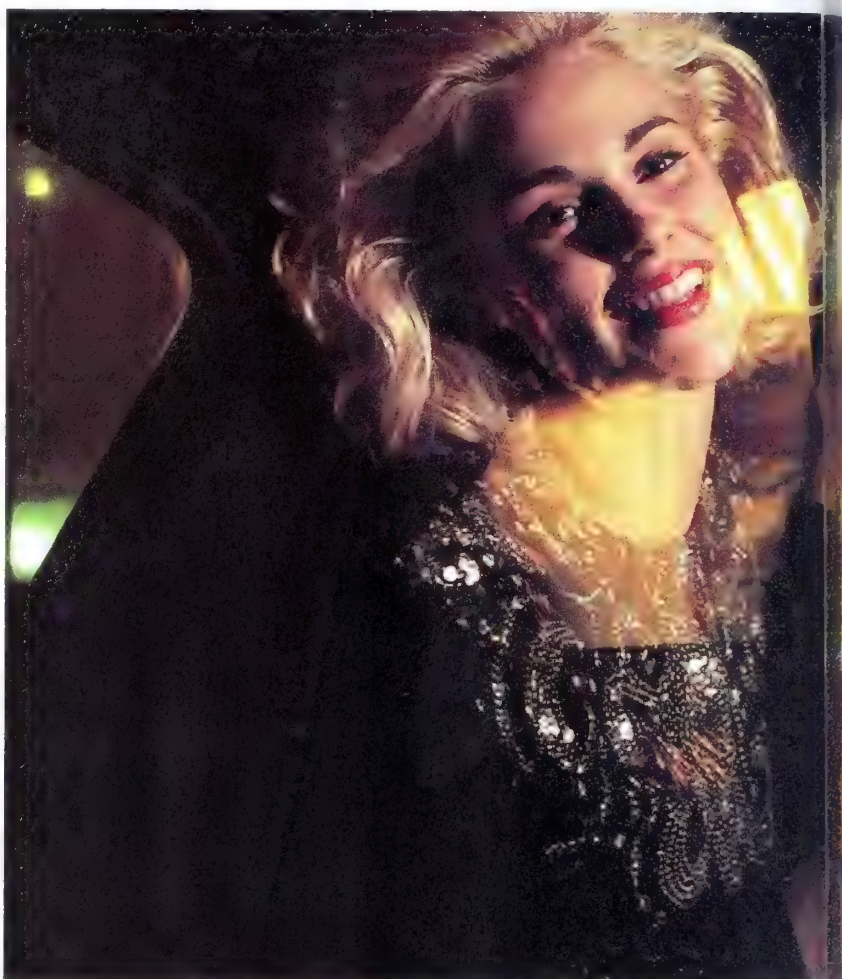
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ying in a city near you.



intimate our city is.
friendly. How nice.
fttimes, a selection of five-
restaurants is but a short
from your hotel. The
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CAN ETHICS BE TAUGHT? HARVARD GIVES IT THE OLD COLLEGE TRY

John Shad's \$20 million pledge to the B-school in 1987 still stirs debate

A magnificent gift, it raised eyebrows and prompted envy around the world: a \$20 million pledge by former Securities & Exchange Commission Chairman John Shad to Harvard business school to advance the cause of ethics. Along with \$10 million from fellow alums, the March, 1987, pledge generated as much controversy as interest.

Some rival deans argued that the subject couldn't be taught in the classroom. Several of Harvard's own professors thought it a nondiscipline, and administrators came to view the pledge as a mixed blessing.

LOST SLEEP. For Thomas R. Piper, a senior associate dean chosen to lead the initiative, the episode has even brought on sleepless nights. "I sometimes woke up at two or three in the morning and said: 'Boy, I wish we didn't get that gift.' We got the gift at a time when we didn't know what in the world to do about ethics. People were expecting an answer, and we didn't have it."

Five years and more than \$5 million later, Harvard is still debating the question—and is still taking it on the chin. "What they are offering is a politically correct, cram-down program," says Mark Pastin, director of the Lincoln Center for Ethics in Tempe, Ariz. Adds consultant Barbara Ley Toffler, a former Harvard ethics teacher: "They haven't done anything new or innovative."

It doesn't help that the most visible reminder of Shad's gift is the B-school's huge \$18 million physical-fitness center named for him. Although none of Shad's pledge went toward the building, it is larger than most B-schools and just across the street from the greater university's athletic complex.

What has changed is the school's commitment. Harvard has recruited a core of four ethics teachers, added courses, and beefed up its research on the topic. Before 1988, it was possible to get a Harvard MBA without any explicit instruction in ethics. Today, the focus begins even before students show up for class (table). The admissions department

requires all applicants to write an essay on an ethical dilemma.

Those who gain admission now find that their first class is in a nine-session nongraded "module" dubbed Decision Making & Ethical Values and taught by some of Harvard's most seasoned professors. The school expects to add yet another module in the second year in 1993. It's also a new world for professors who teach traditional business courses. Encouraged by the school,

ETHICS ALONG THE CHARLES

As part of its ethics program, Harvard business school:

- ▶ Asks applicants to write an essay on how they managed and resolved an ethical dilemma
- ▶ Requires all MBAs to take a nongraded, nine-session course on ethics
- ▶ Works with faculty to integrate ethics into the core courses in such subjects as accounting, marketing, and operations
- ▶ Encourages mainstream faculty to do case studies on ethical questions
- ▶ Offers three ethics electives

DATA BW

they're integrating ethics into both their classes and research. In the past three years, Harvard has produced 35 case studies in ethics, 15 of which have been written by professors in such fields as accounting and marketing.

Thus far, the student reaction is mixed. "I can't say that I've seen anything significant," says one first-year student about Harvard's attempt to integrate ethics into other courses. "More environmental issues have been introduced into the core courses than ethics." Even those who applaud adding the new module to the curriculum doubt that it

can alter the values of students. "You can't impart ethics on a student who's in nine classes," says Christian Johnson, a first-year student at Harvard. "But it was valuable to compare our own sense of ethics with others'." Some 150 students are now taking an elective called Moral Dilemmas of Management, up from 100 last year and only 50 two years ago. Nearly 30% of the 806 members of Harvard's class of 1992 have enrolled in one of three key ethics electives.

NO SAINTS. Yet some critics believe ethics should be treated like any other mainstream subject, with a full-semester, graded course—an approach taken by the University of Virginia's business school. Harvard scoffs at the criticism. "We're not converting sinners," says Piper, "but we're taking young people who have a sense of integrity and trying to get them to connect ethics with busi-

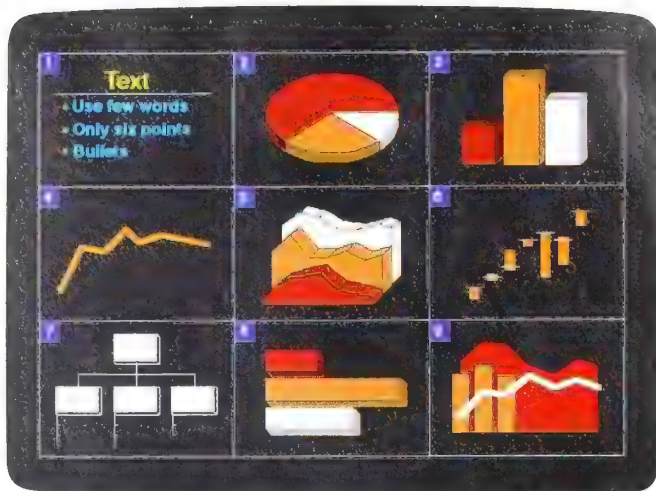


WE CAN WORK IT OUT: THE BUSINESS SCHOOL'S PLUSH GYM

ness decisions." As for Shad, who has donated up to \$5 million and set up a trust fund to cover the remaining \$15 million of his pledge, he says he's "very impressed. It's not just a PR program."

The B-school is considering adding a fourth elective in ethics, doing more research on how the issue affects international competition, launching an ethics program for executives, and sponsoring collaborative efforts with other business schools. As long as ethics remains such a hot topic, Piper is likely to endure a few more sleepless nights over it.

By John A. Byrne in Boston

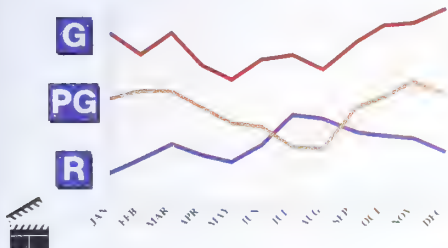


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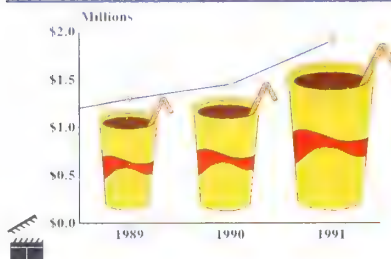
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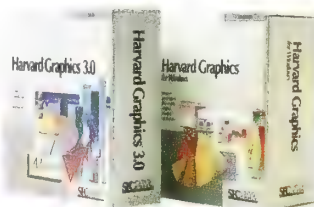
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EDITED BY HARRIS COLLINGWOOD

SKATES ACROSS THE WATER

Roller-blading on the Champs-Élysées? Yes, sporting goods are doing their bit to trim the trade deficit. According to the Commerce Dept., exports of U.S.-made sporting goods rose 8.1% to \$1.19 billion in 1991. Here's a list of the exports that grew the most last year, as well as those that fell the furthest

ADVANCES	DOLLAR VOLUME (Millions)	
	1990	1991
ROLLER SKATES	\$3.2	\$11.0
SNOW SKI EQUIPMENT	28.2	43.2
GYM EQUIPMENT	99.5	123.9
ARCHERY EQUIPMENT	15.4	19.1
FISHING TACKLE	62.0	73.3
DECLINES		
	1990	1991
LEATHER ATHLETIC SHOES	\$63.5	\$44.3
GOLF CLUBS	169.8	145.0
WATER SKIS	10.0	8.5

DATA: COMMERCE DEPT.

A TEPID WELCOME FOR AN IBM PLAN

► IBM on Mar. 25 unfurled a blueprint for computer networks that for the first time don't require a huge mainframe to serve as a traffic cop. But IBM needs other networking companies to buy into its plan, and some are limiting their investment in creating compatible products until they're sure there's a demand from customers. Said Gerry Machi, general manager of Novell's NetWare Systems Group: "We're a very pragmatic company, and it's a huge development effort."

BUFFETT: SALOMON SHOULD LOOK OUTSIDE

► Annual reports don't usually make news, except perhaps when Warren Buffett writes

them. In the new report for Salomon Inc., he hints that when he departs Wall Street, he'll recommend that his job as chairman and CEO of the scandal-shaken firm should go to an outsider. That may come as a blow to Deryck Maughan, operating head of Salomon's broker-dealer, Salomon Brothers.

Buffett's succession plan is in line with the new holding company structure he outlines for Salomon. From now on, Salomon has two self-funding subsidiaries—Salomon Brothers and Phibro Energy. The new structure would ease the spin-off of Phibro, but Salomon denies that a spin-off of either unit is in the cards.

KERKORIAN STILL LOVES CHRYSLER

► Chrysler has been very good to billionaire casino operator Kirk Kerkorian. His 9.8% stake in Chrysler, bought in late 1990 when the company was in the doldrums, is worth some \$463 million today—a 39% capital gain on his investment.

Not that Kerkorian is bailing out anytime soon, associates say. He's a longtime admirer of Chrysler Chairman Lee Iacocca, but the naming of a successor, former GM Europe head Robert Eaton, doesn't faze him, they confide. Kerkorian is comfortable that Iacocca, who'll chair the

A SCHOLARSHIP FOR CHUGALUGGING?

College scholarships: They're not just for the athletically gifted, intellectually superior, or financially impaired. In these cash-strapped times, family bill-payers should be happy to learn that money for tuition is available to just plain folks with normal interests. Brunswick Corp., for example, grants money to students who like to bowl.

Hate bowling? Well, Juniata College in Huntingdon, Pa., has an award for deserving handers. Clean-living types should consider the Gertrude Deppen Scholarship, for a student who doesn't drink, use bacco, or take illegal drugs and stays away from competitive strenuous sports. There's more where this came from, courtesy of Money for College in Granada Hills, Calif. The company helps match students with scholarships. Check it out. If you can build a battery-powered model of anything, you might land a Duracell scholar. Just don't build an Eveready bunny.



executive committee, will keep his hand in. Also, Kerkorian doesn't need the cash for the \$875 million MGM Grand hotel-casino he's building in Las Vegas.

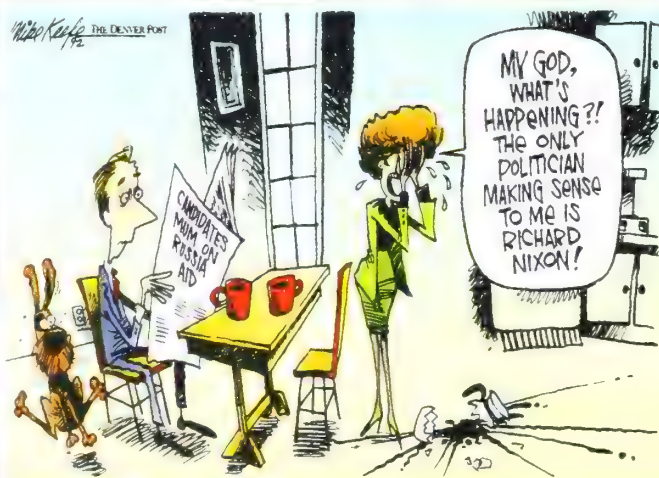
BREAST CANCER AND PCBs: A POSSIBLE LINK

► For all the attention given the subject, little is known about the causes of breast cancer. But a new study to be published in the journal *Archives of Environmental Health* in April may hold a startling clue. The article takes issue with the widely held belief that high-fat diets

contribute to increased breast cancer in U.S. women. The authors, five scientists working at universities and hospitals around the country, suggest for the first time that pesticides and chemicals in fatty foods—not the fat itself—may be the real culprit.

The researchers found that the tissues of women with breast cancer showed concentrations of polychlorinated biphenyls (PCBs) and certain hydrocarbon-based pesticides 50% to 60% higher than normal. PCBs, which are soluble in animal fat, are prevalent throughout the food chain because of their wide use. Before a ban, PCBs were used extensively for insulation and lubrication in products found in the home and in factories and offices.

The findings could be a missing link in understanding the growing incidence of breast cancer. As many as one in four women may be at risk, believes Dr. Frank Falk Jr. of the University of Michigan, one of the authors. He thinks the study "should generate a national debate." Steeped in the controversy, Monsanto, the sole U.S. producer until it stopped making PCBs in 1977, and Westinghouse and General Electric are the largest users.



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PEROT AFTER THE PRESIDENCY— FOR THE PRESIDENT?

The crowd at the National Press Club on Mar. 18 had come to hear some plainspoken prescriptions for the nation's ills. But Texas business legend H. Ross Perot, with a zing aimed at George Bush, asking listeners if they'd eaten their broccoli. "Last thing I read, it cures cancer," he said. "I think we ought to all try it."

Perot would probably rather eat a carload of his least-liked veggie than see Perot get serious about his latest passion: an independent bid for the Presidency. The pinstriped populist knows this is the longest of long shots. "Any student of history says it won't work," Perot concedes cheerfully. But the Dallas-based chief executive of Ross Perot Systems Corp. has flashed a green light to supporters who want to get him on the ballot in all 50 states this fall.

Perot isn't laughing at this quixotic quest. One national poll shows Perot getting 15% of the vote, enough to cost Bush the White House battlegrounds as Texas and California. Perot's individualism and blasts at the federal government are likely to appeal to entrepreneurs and to Reagan Democrats. "Any businessman who has \$2 billion to spend and wants to run for President, you better take him seriously," says Perot's adviser Charles Black. "The people need a leader to be in our column."

'OXYGEN.' The prospect of snatching victory from Bush is driving Perot. The unconventional billionaire deeply dislikes Bush's country-club pragmatism. Some associates say Perot has never forgiven Bush for scoffing at derring-do plans to free U.S. captives in Vietnam. "If [Perot] denies Bush the presidency, he'll be on top of the world," says a long-time associate. Adds a prominent Texas Republican worried about Perot's motives: "He hates George Bush." Perot's year in which Washington experience is regarded as a bright light, Perot has appeal. He's the visionary who found-

ed Electronic Data Systems Corp., sold it to General Motors Corp. for \$2.6 billion, but found himself unable to work within GM's bureaucratic morass. "He's not part of the crap that got this nation in this mess," says Jack Gargan, president of Throw the Hypocritical Rascals Out, a Tampa-based anti-incumbent group. "He's a shot of pure oxygen."

QUONDAM HAWK. Perot's hard-to-classify politics combine East Texas populism with high-tech wizardry. Among his ideas: electronic town meetings, where voters vent their feelings through computer-linked televisions; paperless tax returns for most Americans; and a constitutional amendment requiring a referendum to raise taxes. Perot was a hawk during the Vietnam war but blasted the gulf war as a misguided crusade to rescue a corrupt emir.

After being blindsided by Pat Buchanan, Bush's aides aren't taking any chances. Should Perot decide to go for it, the White House will attack him as an egotistical eccentric whose liberal views on abortion and civil rights put him more in tune with Jesse Jackson than with Middle America. "He's got to understand he's a fringe candidate," warns another longtime Bush strategist. And Perot's notoriously thin skin could get him into serious trouble in the rough-and-tumble of a campaign.

Perot's opponents often underestimate him, however. In Texas, he mobilized grass-roots movements to stiffen drug penalties and reform the state's school system—trampling a lobby no less potent than high school football coaches. He may have little chance of winning the White House, but that's not the game. If Perot is willing to expend his formidable fortune and energy, he has the power to make life miserable for President Bush. And that might be satisfaction enough.

By Richard S. Dunham and Douglas Harbrecht, with Wendy Zellner in Dallas



HEY, GEORGE: GADFLY H. ROSS PEROT

AL WRAPUP

TH
Conservative House Democrats could derail the party's plans to pass health care reform into bad medicine for President Bush. House and Senate Democratic leaders still hope to pass a bill through Congress, wait for President Bush to veto it, then attack the bill as the only thing standing between Americans and better health care. But the 75-odd members of the Conservative Democratic Forum may call for a radical overhaul by pushing for a modest alternative. The proposal, drafted by Representative Tom Cooper (D-Tenn.), would require companies to buy insurance from man-

aged-care networks to qualify for tax deductions. It would also expand eligibility for medicaid, allowing the near-poor to buy into the plan.

EXPERIENCE

If Bush really wants to cater to anti-Washington sentiment and run as the foe of the status quo, he might have to assemble a new team. Bush and his Cabinet have 257 years of experience in the capital. And six top officials, including the President and Vice-President Dan Quayle, have racked up 77 years of service in the reviled Congress. Veterans Affairs Secretary Edward J. Derwinski leads the pack with 25 years in the House.

COMPETITIVENESS

The anti-regulation SWAT team at Quayle's Council on Competitiveness has succeeded in easing proposed pollution rules and speeding new drug approvals. Now the council is taking aim at what one top Administration official calls "the enormous barriers in telecommunications that are standing in the way of innovation." Issues to be addressed include legal restraints on local phone companies, lack of competition among them, and regulations that hobble more efficient allocation of the broadcast spectrum. The council plans to detail its complaints in an April white paper.

THE FIFTH TIGER IS ON CHINA'S COAST

And Deng hails booming Guangdong as a model for the nation

When the Shunde county government decided to gear up output at its Pearl River Refrigerator Factory in 1989, the timing seemed ideal. Its refrigerators were China's favorite domestic brand, and the plant was selling all it could produce. Then came Tiananmen Square, followed by a freeze on bank credit to consumer industries ordered by Beijing's hard-liners. Ignoring Beijing, Shunde's gung-ho officials completed the \$50 million expansion anyway. To pull it off, officials relied on an ever-popular proverb: "The heavens are high, and the emperor is far away."

Not anymore. In late January, the factory received a snap visit from the emperor himself, paramount leader Deng Xiaoping. But rather than give Shunde officials a tongue-lashing, Deng praised them for "blazing a trail for Chinese industry." It was a message that a surprisingly spry Deng repeated often during his nine-day swing through Guangdong province, whose economy surged 13.5% last year, double the national growth rate.

For Guangdong officials, the ringing endorsement from the 87-year-old patriarch was sweet vindication. The implications for China, however, are much greater. In a far-reaching policy shift, Deng is holding

defiant Guangdong up as a model for the rest of China. No longer considered a capitalist experiment run amok, it is Deng's weapon against conservatives who have opposed market-style reforms. In probably his last great battle, Deng is trying to edge out old political enemies and dictate the slate of next-generation leaders. That effort will culminate in a crucial party meeting this fall. "Deng is quickening the succession struggle," says a Western diplomat in Beijing.

MASTER PLAN. Emboldened by Deng's trip, officials in Guangdong aren't waiting for the power struggle to be settled. For the past decade, they have stoked the growth of the province of 66 million by an average of 12% annually, while industrial output has soared nearly 20%. If Guangdong were a country, it would be the fastest-growing in the world. But now, local officials want more. They want to catch up with the current level of Asia's Four Tigers—South Korea, Taiwan, Hong Kong, and Singapore—within two decades.

The master plan is mind-boggling: Some \$35 billion is going into construction of new superhighways, power plants, container ports, and optical-fiber phone lines. Current targets call for annual growth of 8.1%, which would enable gross domestic



ONCE NOVELTIES, SUCH LUXURIES AS

product to double to \$58 billion by the year 2000 and for exports to rise 150%, to \$6 billion.

This progress is what allows Deng to bring new pressure on his opponents whose own economic strategies have flopped. Even leading conservatives such as Prime Minister Li Peng have lined up behind Deng's approach. In mid-March, the 15-man politburo declared that Deng's reforms and open-door policy would remain in place "for 100 years." The government also said it will open a dozen new free economic zones along China's coast similar to the three in the Guangdong cities of Shenzhen, Zhuhai, and Shekou.

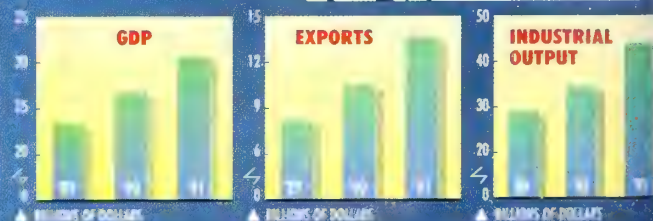
Whether Deng has the clout to achieve



SHENZHEN'S NEW HOUSE EXPECTS 200 LISTINGS IN FIVE YEARS

GUANGDONG IS BECOMING A REGIONAL POWERHOUSE IN CHINA

SOURCE: PRC GUANGDONG PROVINCIAL GOVERNMENT





STYLISH APARTMENT COMPLEXES, AND SATELLITE DISHES ARE BECOMING COMMONPLACE

everything on his agenda is far from certain. Despite his support of the overall reform package, Li Peng is still vowing crackdowns on "bourgeois liberalism," the old-line code word for Western influence. And he warns about the dangers of instability from fast growth, including runaway inflation, supply bottlenecks, and kindling of social discontent. The Deng camp is willing to risk those to lift China out of grinding poverty. The collapse of communism in the Soviet Union was a turning point, say China watchers. Deng now believes, says Parris Chang, a China specialist at Pennsylvania State University, "that to avoid the fate of the Soviet Union and Eastern Europe, China must reform itself and create better conditions."

PUTTING BEIJING. China's central planners probably couldn't slow down Guangdong if they wanted to. With only 3% of its capital investment supplied by Beijing and easy access to funds from Hong Kong and local banks, the province has the means to resist the central government's dictates on everything from foreign investment to fiscal policy. One important wedge for Guangdong is money. The province sends 10% of its tax revenue to the central government, or more than \$1 billion, compared with the old rate of 20%.

What allows Guangdong to be more open to foreign investment than any other province. The massive shift of low-wage production work from Hong Kong and Taiwan has made it one of the world's biggest exporters of garments, toys, watches, and appliances. But the Pearl River delta region is much more than a big sweatshop

for foreigners. It is coming into its own as a regional power. Enterprises owned by local governments and run by independent managers are evolving into large manufacturing conglomerates. A nascent stock exchange in Shenzhen, which by yearend will have 20 listed companies and a market capitalization of some \$4 billion, is a smash with both private Chinese investors and companies hungry for capital.

That prosperity is no longer confined to the provincial capital of Guangzhou and the special economic zone of Shenzhen, the area where the open door policies began back in 1979. Across the province, through former backwaters such as Zhongshan, Dongguan, and Nanhai (map), such once novel items as mobile phones, stylish apartment complexes, satellite dishes, and Japanese-style *karaoke* bars are becoming commonplace.

Especially cheering to Deng, still a communist at heart, is that a surprisingly dynamic sector of the boom is owned by townships, counties, and even old rural farming collectives. That bolsters his argument that China can absorb some trappings of capitalism without completely destroying socialism. Take Shunde County. Before 1979, the 930,000 residents of the

Conservatives are mounting a stiff fight against 'Guangdongization'

area, which is mostly sugar and rice fields, subsisted on about \$125 a year each. Now, the region is a hotbed of county-owned manufacturers of home appliances, textiles, and machinery. Annual per capita income is nearing \$1,000.

Other important engines of growth are outfits such as Pearl River Refrigerator. Eight years ago, it was an auto repair shop that was owned by a rural township. Now, it's a sprawling complex with 2,800 workers who turned out 480,000 refrigerators in 1991. More than two-thirds of these were sold outside of Guangdong.

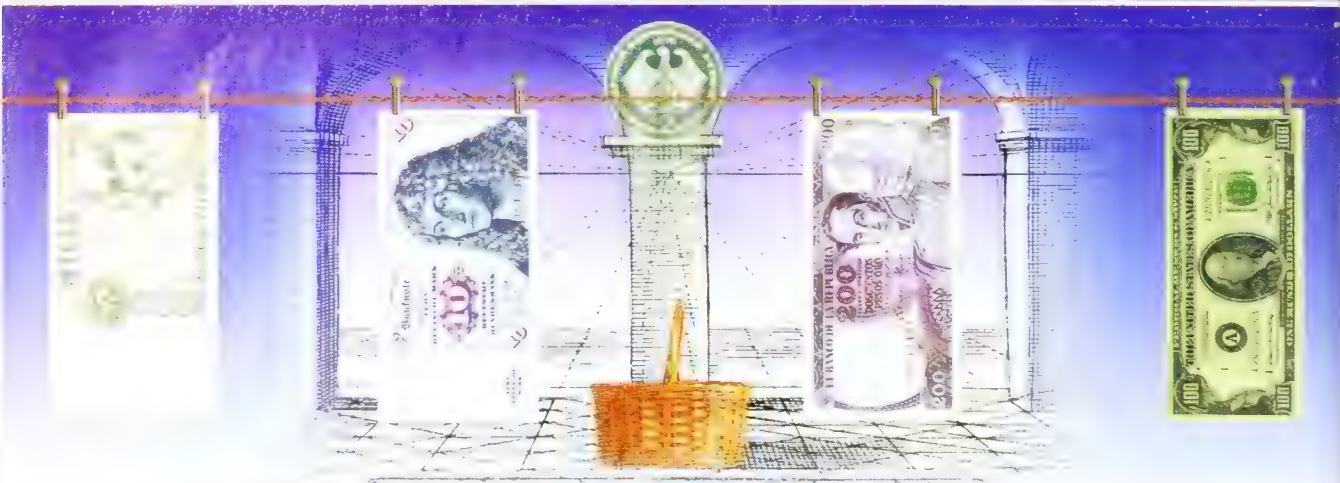
BROKEN BOWL. Guangdong's growing stature is lending credence to its management techniques. Its success, for example, clearly challenges the inefficient state enterprises in other parts of China. At the Weili Washing Machine Factory in Zhongshan, the city officials who own the plant leave managing to the plant's executives, who are elected by the 2,000 workers. "The line between owner and management has been well settled," says Vice-General Manager Li Guo in the company's meeting room. "We have the final say." Moreover, workers' pay is pegged to their productivity, a sharp deviation from China's traditional "iron bowl" of guaranteed income.

Resistance to the "Guangdongization" of China will be led by conservatives such as Chen Yun, China's 86-year-old doyen of economic planning and Deng's archrival. These forces are mounting a stiff fight, raising the specter of inflation and social unrest. Some foreign bankers, too, worry about a repeat of pre-Tiananmen Square days. In 1988, 11.2% growth fueled runaway inflation, panic buying, bitter competition for scarce electricity and raw materials, and widespread corruption.

What Deng wants is a boom that endures. To assure that his policies continue, he is angling to stock the top leadership with younger reformers such as Vice-Premier Zhu Rongji and party chief Jiang Zemin. He also could engineer the comeback of Zhao Ziyang, who was an advocate of rapid growth and boosted Guangdong before he was toppled as premier in 1989. "Deng Xiaoping is making his last stand," says Pennsylvania State's Chang. "If he cannot get his reform program accepted and get his favored group of successors endorsed, then he will go down in history as having his reform program aborted."

However the battle unfolds in the run-up to the 14th Party Congress this fall, officials in the Pearl River delta don't sound worried. "The course of reform is irreversible," declares Shunde official Wu Xiuhao. "China has no other way out." For its part, Guangdong is intent on becoming Asia's Fifth Tiger. The question is whether the rest of China will go along.

By Pete Engardio in Guangzhou, with Lynne Curry in Beijing



GERMANY

GERMANY'S BRASH NEW IMPORT: DIRTY MONEY

Its banks can legally launder cash—and do so, by the suitcase

Think of a German banker, and what comes to mind? A fastidious financier who's the very model of respectability? Think again. Germany is fast becoming the new mecca for global narcotics funds. It's now the biggest European financial center where money-laundering isn't a crime.

Germany won that distinction last year when Switzerland, the traditional magnet for illicit profits, tightened its disclosure policies. Since then, German authorities estimate that up to \$50 billion, much of it from Colombian, Turkish, and Italian drug cartels, has flowed in. The funds are plunged into securities or gold or, in a new twist, are used to buy real estate and companies in eastern Germany and Eastern Europe. "Germany has become a playground of international money-laundering syndicates," says Hagen Saberschinsky, a top official at the Federal Criminal Office, Germany's equivalent of the Federal Bureau of Investigation.

History complicates matters. Bitter memories linger of Gestapo agents arbitrarily seizing property during the Nazi years. Consequently, German lawmakers have been reluctant to draft rules on taking property even if criminal activity is involved. What's more, by custom, Germans prefer dealing in cash.

As a result, German curbs on money laundering are loose, at best. Customs officials at German airports, for example, may not seize, even temporarily, the suitcases and duffle bags full of cash from South America, Europe, or South

Asia that parade by every day. Before they can act, they need proof that the cash came from drug deals. And if a courier shows up in a German bank with bundles of cash, the bank will accept the deposit, no questions asked.

NO FISHING. Police are hamstrung, too. To obtain information from banks about questionable deposits, they must provide a court with the specific numbers of banknotes that changed hands during a drug sale. Says Hans Körner, a chief of the money-laundering unit at the Hessen District Attorney's Office: "Our bankers become extremely uncooperative with the police when they're dealing with very large deposits." Yet an official with the German Banking Assn. insists that bankers are "always ready to help when the police show sufficient proof."

Investigators are turning up more and more links between German banks and international drug operators. According to an account in the German magazine *Der Spiegel*, the manager of a Commerzbank branch near Hanover allegedly opened several accounts for members of the Medellín cocaine cartel. The banker, whose wife is related to cartel mem-

bers, handled hundreds of thousands of dollars in Medellín transactions. A Commerzbank official, while denying any wrongdoing by the bank, confirms the press report and says that the manager was fired for his unauthorized actions.

Der Spiegel also claims that Luxembourg subsidiaries of three major German banks accepted deposits several years ago totaling millions of dollars from dummy corporations controlled by Gonzalo Rodríguez Gacha, a now-deceased Colombian drug lord. Dresdner Bank, one of the trio, has confirmed that the corporate accounts noted by *Der Spiegel* did, in fact, exist. Deutsche Bank, also cited in the accounts, says Luxembourg's bank secrecy laws prevent it from getting information from the subsidiary. Frankfurt-based Bank für Gemeinwirtschaft declined comment.

What's more, drug money is flowing from a new source: Eastern Europe. Police say that Poland now is the source of some 20% of the illegal amphetamines in the European Community. They suspect that German chemical companies are supplying Poles with the needed materials and are getting paid through Polish banks. The money is transferred back to Germany where it is very hard to trace.

Pressure to change is coming from the EC and the U.S. Drug Enforcement Agency. Last June, the EC issued directives to prod members to adopt money-laundering laws by 1993. This convinced Chancellor Helmut Kohl that Germany must play ball. His Cabinet has approved laws to make money-laundering a crime and require disclosure of large cash deposits. But banks—and some politicians—oppose the measures, arguing that any erosion of secrecy could scare away customers by exposing them to tax authorities. If the lobbyists succeed, the world's drug dealers will continue to find friendly bankers in Germany.

By Igor Reichlin in Bonn, with Peter Galuszka in New York

Drug money is now coming in
from Eastern Europe
and, in particular, Polish
amphetamine operations



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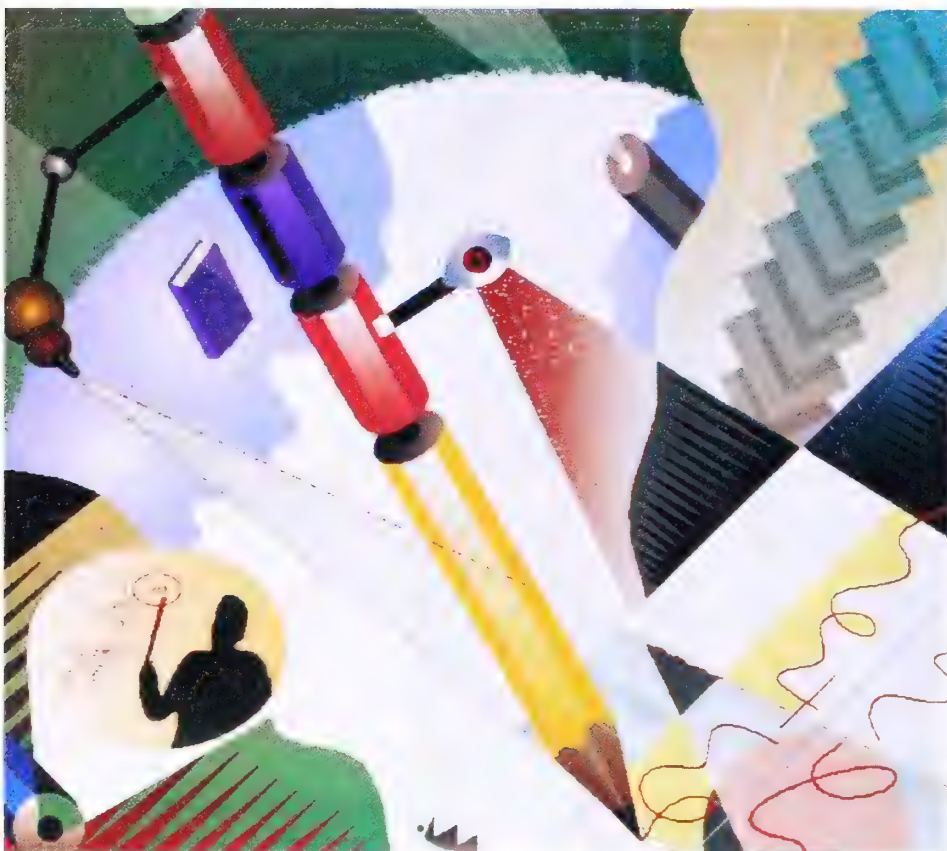
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BusinessWeek

WHY ITALY'S POLITICAL MESS REALLY MATTERS THIS TIME

What do animal-rights advocates, a former porn star, and Mussolini's 29-year-old granddaughter have in common? All are parliamentary candidates in one of the most highly charged campaigns in recent Italian history. In the Apr. 5 vote, the traditional parties that have shared power since World War II will be put to the test by neofascists in an array of new organizations, including dozens of single-issue groups such as pro-hunting activists, the Housewives' League, and the powerful *Leghe*—secessionist leagues that demand an autonomous republic in the rich north.

Normally, Europeans do not worry much about ferment in Italy, where a kind of steady chaos has existed since the war. But this time is different. If Europe is to move on the road to monetary and political union agreed to at the recent Maastricht summit, it needs an Italy that can deliver on reforms needed to bring the country in line with other powers.

Questions? The betting is that the Christian Democrats, in power for 40 years, will lose their working majority. Such a result may produce a new coalition that is incapable of dealing with 6% inflation or curbing budget deficits, which now stand at 10% of gross national product—twice American levels.

Already, many Italians say the country is not taking needed steps to stay in the economic forefront. As the deadline for economic unity nears, state companies still control vast swaths of industry and finance, and the government protects champions such as Fiat and Olivetti. While small-scale industry remains a potent force, Italy's macroeconomic numbers are look-alikes to Spain's or Portugal's rather than Europe's first mover, Germany. "Italy is diverging with Europe, not converging," says Olivetti Chairman Carlo De Benedetti.

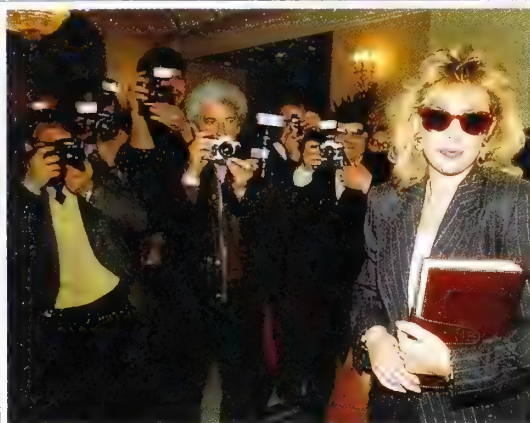
But Italy's problems coincide with political disarray in other European Community mainstays. On Mar. 22, the French Socialists suffered a humiliating defeat at the hands of environmental parties and the right-wing National Front. The Apr. 9 British election seems unlikely to give any party a strong mandate. Weak governments will be vulnerable to special interests and groups such as the *Leghe*, which stand to win a hefty chunk of the vote in Italy's north. "The problem," says one senior executive in Rome, "is that while leaders are continuing to talk about integration, the grass roots is thinking about disintegration."

That is especially true in Italy, where fear of the Communist Party is what kept the Christian Democrats in power so long. But with the Soviet collapse, the party is losing its *raison d'être*. Instead, voters are focusing on the CDs' reputed corruption and aging leadership.

As the campaign heats up, Prime Minister Giulio Andreotti and his ally, Socialist leader Bettino Craxi, are pinning their hopes on the poor, crime-ridden south. There, local bosses often can corral tens of thousands of votes. But the mysterious Mafia-style slaying in Palermo on Mar. 12 of Salvo Lima, a key Andreotti stalwart who supposedly could deliver 250,000 votes, has put even that strategy in doubt. The rattled Andreotti has accused unnamed elements of trying to destabilize Italy.

While the wily, 71-year-old Andreotti may yet survive the crisis, the decline of Christian Democrat influence could make it harder to do business in Italy—at least in the short run. The shakeup may also presage upheaval in other EC countries, as the twin shocks of the cold war's end and the single market's beginning to work their way through the political system.

By John Rossant in Rome



NEOFASCIST CANDIDATE ALESSANDRA MUSSOLINI

BAL WRAPUP

WITH KOREA

The strong showing by multibillionaire industrialist Chung Ju Yung's party in the Mar. 25 general election presents the strongest challenge yet to Korea's ruling elites. Chung's Unification National Party won 31 of the 273 parliamentary seats, depriving President Roh Tae Woo's Democratic Liberal Party of a clear majority. Prominent dissident Kim Dae Jung scored gains.

Roh, a former general, has allowed the country to take on more of the trappings of democracy without completely wiping out military influence. Chung, the 77-year-old founder of

the powerful Hyundai group, scored big with his Ronald Reagan-style criticism of governmental interference in the economy. Now, liberalization is up in the air, and Korean politics could turn nastier—just as the country is trying to cope with increasing economic problems, including inflation at home and stiffening global competition from Japan.

Chung's successful move into politics may force the government to take a more laissez-faire approach to the activities of the *chaebol*, Korea's giant business groups. In recent years, the government has tried to direct their investment and influence their trading strategies. But some analysts worry

that Roh's weakened position could lead to instability. Reflecting such fears, the stock market lost 2.8% on Mar. 25.

Interest now is shifting to the December presidential elections. In a step toward further liberalization, the ruling party appears likely to choose Kim Young Sam, a former dissident, as Roh's successor. The President is barred from serving another term. But Kim's enemies will probably blame the party's poor general-election performance on him. Industrialist Chung is mulling a run for the presidency. His candidacy would probably create more divisions at a time when Korea least needs it.

THE JACKIE ROBINSON OF THE FRONT OFFICE?

Joel Ferguson is out to erase the last color line in baseball

In the spring of 1947, eight-year-old Joel I. Ferguson joined neighbors packed into the small living room of a two-story wooden house in Lansing, Mich. He was watching the World Series on one of the few television sets in the neighborhood, and what he saw he would never forget: Bat in hand, Jackie Robinson, Major League Baseball's first black player, stepped to the plate against the Yankees.

A bum arm and the inability to hit the curve foiled little Joe's dream of following Robinson into the bigs. But 45 years later, Ferguson has a shot at a first of another sort. He's bidding to buy a controlling stake in the Detroit Tigers. If he can ink a deal with current owner and Domino's Pizza king Tom Monaghan, Ferguson will do with a pen what Robinson did with a bat: break the color barrier in an all-white club.

OLD BOYS. Today, the clubhouses of Major League Baseball are thoroughly integrated. A black man, Bill White, is president of the National League, and minorities filled 16% of front-office positions in major-league clubs in 1991, up from 2% in 1987, according to Major League Baseball. But there are no black club presidents or general managers—or, of course, owners.

The Tigers would be a prime candidate to break baseball's last color bar. The team has been on the market since January, when Monaghan announced his wish to sell most of his holdings. He bought the Tigers for \$53 million in 1983 and is asking at least \$100 million, which is considerably higher than the team's estimated value of \$83.6 million. Ferguson refuses to jump into a bidding war but says he's prepared to pay Monaghan's asking price.

The two other likely bidders for the team, Edsel Ford II and Keith E. Crain, a scion of the Crain Communications Inc. fortune, epitomize the old-boy network. Both have spoken publicly about having wanted to own a baseball franchise since they were young boys. Joel had different childhood goals. "When I was a kid," he says, "I just wanted be able to afford a hot dog at the game."

Ferguson declines to estimate his net

worth, but clearly, today he could buy franks for the whole stadium. Nonetheless, Ferguson says that Monaghan hasn't treated him as a serious bidder. When Ferguson asked to review the Tigers' financial package, Monaghan stalled, explaining that the data wouldn't be ready for another two weeks. But by that time, the package had been in Ford's hands for two months. Then, Monaghan asked Ferguson for information on his personal finances. Ford, who faces no such requirement, told the local press that "maybe the name helps." Crain declined to comment on the status of his bid, and Monaghan's camp didn't reply to requests for an interview.

Judging from his past, Ferguson isn't likely to get discouraged. He started out in the early 1960s tossing steel at the local Oldsmobile plant while attending Michigan State University. But rather than become the first black foreman, and the only one with a college degree, Ferguson moved on to become athletic director at a neighborhood park. He says it was an insult for Oldsmobile to offer him a job that required a bachelor's degree from a black man but not a white one. He then gained prominence as a local spokesman during the racial unrest of the 1960s and was elected Lansing's first black city council member in 1967.

While cutting his teeth in politics, Ferguson was also learning about real estate. He swung his first deal in 1969, borrowing \$121,000 to buy a property and reselling it for \$360,000 the same day. From there he built a string of low-cost apartments and senior citizen developments. Strong demand for both types of housing—and a close relationship with the Michigan State Housing & Development Authority—have enabled him to weather the real estate bust. "He's a good systems guy," says Paul V. Gentolozzi, a Lansing developer. "Joel gets a quick grasp of how the system works."

He has stayed involved with the local community, founding a bank and the

first ABC-TV affiliate in Lansing. He lost a bid for mayor in 1973 and managed Jesse Jackson's upset victory in the 1988 Michigan Democratic Presidential primary.

Ferguson has already thought about how he would promote the Tigers, which, despite ranking 20th out of 26 teams in ticket sales, eked out a \$5.1 million profit last year. Since black attendance at Tiger Stadium has been comparatively low, he would begin marketing directly to African Americans, in part by urging players to take a more active role in community projects. In that, he might get help from a famous Michigan gander: Earvin "Magic" Johnson, who is rumored to be joining Ferguson in his bid.

Baseball's hierarchy claims to be neutral on Ferguson. Says Stephen D. Greenberg, deputy commissioner of Major League Baseball: "If those owners are black or brown or whatever, it won't make a difference." But to someone who grew up admiring Jackie Robinson the pioneer, being the first black to join baseball's most exclusive club would make quite a difference.

By Greg Bowens in Lansing, Mich.



FERGUSON'S RESUME

BORN

1939, Lansing, Mich.

EDUCATION

BA, elementary education, 1965, Michigan State

BUSINESS

President and co-owner of F&S Development Co. and First Housing Corp., Lansing. Companies own or operate over 5,000 housing units and office buildings in Michigan

Owner of WLJ-TV (Channel 53), Lansing's first ABC network affiliate

Founder of Capital National Bank, Lansing

POLITICS

Michigan Democratic Party officer; Michigan chairman, 1988 Jesse Jackson campaign; the first black elected to Lansing City Council

DATA: BOW



FUJITSU

Technology Is Only The Beginning



Fujitsu is a \$21 billion technology giant. It makes

some of the world's fastest supercomputers, lightest laptops and smallest cellular telephones. Merging its core technologies in computers, telecommunications and microelectronics, it is creating 21st century products and services - today.

But Fujitsu also knows that technology is only the beginning. Success in the highly competitive North American high-tech marketplace takes people - people who understand local needs and can turn technology into solutions.



Fujitsu develops state-of-the-art 2.5-inch disk drives at its R&D facility in Colorado.

Fujitsu Delivers Solutions In Computer Products

"Fujitsu delivers solutions, not just products," emphasizes Lew Frauenfelder, president and CEO of Fujitsu Computer Products of America (FCPA). "Our mission is to give our customers solutions tailored to the way they work and live."

An American high-tech veteran, Frauenfelder founded and developed Colorado-based Intellistor, Inc. into a world leader in

data-storage and disk-drive technology.

Frauenfelder eventually sold his company to Fujitsu, one of Intellistor's largest customers. He stayed on to build Intellistor into a key element in Fujitsu's global R&D effort and last year became president of the newly formed FCPA.

Fujitsu Products Meet Customer Needs

The world's second largest computer company, Fujitsu has a long track record of working closely with customers to enhance their operating efficiency.

Frito-Lay, for example, recently won the prestigious Computerworld Smithsonian Award for its use of Fujitsu handheld computers in snack-food distribution and inventory control.

Tandem uses Fujitsu's highly reliable disk drives



Fujitsu scanners provide fast, top-quality images for high volume document management.



Fujitsu was the first to design automated teller machines with voice guidance and braille features to accommodate visually impaired customers.

at 200,000 hours mean between failure — in transaction-processing computer product line.

u Pushes Open Systems

wide, Fujitsu is a leader in the drive for open-systems computing. Open systems point the direction the computer industry must go as working replaces standalone equipment. A good example is Fujitsu's VP2000 Series supercomputers, now being marketed to the U.S. private sector. At Fujitsu America's San Jose (Calif.) supercomputer center, independent vendors can port their software to the UNIX®-based platform, including Fujitsu supercomputers worldwide.

u Expands U.S. Capability

Fujitsu's skilled workforce in the U.S. is dedicated to meeting the needs of the market. Last year, the company integrated its American computer production, manufacturing, distribution and R&D operations under the FCPA banner.

This consolidation will increase Fujitsu's ability to adapt quickly to changing customer needs.

In 1992, FCPA is expanding R&D at Intellistor. It also anticipates increased activity at its Hillsboro (Ore.) manufacturing facility.

Emphasizing miniaturization to increase product capacity, Intellistor is developing integrated disk arrays for Fujitsu supercomputers. Disk arrays can handle more data faster and more reliably — with 100% up-time as the goal.

R&D also focuses on small form-factor disk drives for the fast-growing laptop and notebook com-

puter market. This has enabled Fujitsu to establish itself as a major force in the competitive 2.5-inch disk-drive business. "Our aim," Frauenfelder asserts, "is to become the world's premier supplier of small form-factor disk drives."

Frauenfelder intends to push the company a long way. "Our long-term vision," he says, "is to serve the North American market by combining the best of an entrepreneurial company culture with worldwide corporate resources."



The 1.2 pound PoqetPad™ from Fujitsu is a pen-based portable computer.



At the San Jose (Calif.) warehouse, FCPA President and CEO Lew Frauenfelder sees increased demand for Fujitsu printers.



With the small and light Fujitsu **POCKET COMMANDER™**, Santa Clara University head basketball coach Carroll Williams stays in touch.

Fujitsu Creates Tomorrow's Telecommunications Networks—Today

"The line between telecommunications and the computer business is blurring," stresses Tony Carollo, executive vice president and chief operating officer of Fujitsu Business Communication Systems (FBCS).

"Digitization," he explains, "will facilitate the merging of public and private networks into a seamless voice/data/video telecommunications highway." In the future, executives will be able to resolve issues using face-to-face video teleconferencing, while sharing data on their computers.

An architect of Rolm Corp.'s success in the '70s and '80s, Carollo joined FBCS because he saw a fit between its strengths and his skills. Fujitsu had technology and products. Carollo added his expertise in North American marketing and distribution.



Telecommunications veteran Tony Carollo, now FBCS chief operating officer, sees a bright future in Fujitsu's advanced PBX technology.

Fujitsu Has Across-The-Board Strength In Telecommunications

Fujitsu's product line ranges from the **POCKET COMMANDER™**, one of the world's smallest and lightest handheld cellular telephones, to one of the world's fastest fiber-optic transmission systems, capable of carrying an encyclopedia's contents across the country in seconds.

Fujitsu was the first to market a synchronous optical network (SONET) multiplexer. SONET is the industry standard for public network fiber-optic transmission products. Using Fujitsu's SONET equipment Cincinnati Bell will be first

U.S. to provide its commercial customers with a service that can withstand natural disasters and equipment failures. Fujitsu's ISDN-ready F9600 PBX was designed from the ground up to be a platform for tomorrow's digital communications. Its architecture allows users the flexibility of integrating voice, data, fax and video images. Fujitsu is also the leading provider of ISDN telephones and terminal adapters that are compatible with major office switches.

Keeps Customers At The Heart Of Technology

Fujitsu technology supports customers' growth. Later, Fujitsu Network Switching Systems

(FNTS) became the first supplier of lightwave equipment to receive MCI Telecommunications Corp.'s coveted Supplier Of The Year Award.

In 1991, Fujitsu Network Switching of America (FNS) began working with BellSouth on a trial of Fujitsu's FETEX™-150 — the first asynchronous transfer mode (ATM) broadband switch installed in a U.S. telephone central office.

This trial is a preview of the future in telecommunications. Using FETEX-150 technology, medical researchers at the University of North Carolina will soon have switched access to a supercomputer 18 miles away. This will enable them to obtain virtually instantaneous, sophisticated medical images for planning cancer treatment.

Fujitsu Focuses On Tomorrow's Needs

"In the future," says Jinjiro Dodo, chairman and chief executive officer of FBCS and chairman of FNTS, "information will be downloaded visually, by data and voice—fully digitized, fully multimedia."

"Our telecommunications operations, therefore, will increasingly focus on providing integrated network solutions for customers," continues Koji Inoue, president of FNTS. "Fujitsu has the switching, the transmission and the computer technology to do this."



The F9600™ digital telephone from Fujitsu. The F9600 PBX system was designed as a platform for 21st century digital communications.



Richardson (Tex.) Telecommunications Center is one of the company's primary global research and manufacturing facilities.



Convex Chairman, President and CEO Robert Paluck (center), FMI President Mitsumasa Ashida and Sr. Rich Christopher inspect circuit board using ICs developed for Convex by Fujitsu.



Fujitsu Puts More Power Into Microelectronics

"Fujitsu has a good vision of the future," says Rich Christopher, a high-tech veteran, now senior vice president at Fujitsu Microelectronics, Inc. (FMI) in San Jose (Calif.). "Other companies worry about short-term results. Fujitsu concentrates on the 21st century."

"Here at FMI, we combine Fujitsu's global technological strength with local engineering creativity," says Christopher. "This allows us to develop better products for the North American market."



Fujitsu Helps Customers Open New Markets

Fujitsu works closely with its customers to develop new technologies and new products.

FMI's engineers collaborated with Sun Microsystems, Inc. in developing the reduced instruction set computer (RISC) chip—the technology which brought mainframe computing to the desktop.

Now, design teams from FMI and Intergraph Corp. are cooperating on chips for

Intergraph's next generation of engineering workstation.

Technology Puts Fujitsu Ahead

Global strength in technology is the key to Fujitsu's success. In semiconductors and microelectronics, it ranks as one of the world's top suppliers. It leads in application specific integrated circuits (ASICs)—a key technology needed for developing specialized, advanced electronics products.

Few competitors can

match its

submicron

manufacturing

capability. This enables Fujitsu engineers to fit more functions onto each chip.



Fujitsu's high-resolution plasma display offers a space-saving alternative to bulky CRTs for workstations, such as Sun SPARCstation™ IPC (above).



capabilities, so that they can obtain solutions to meet their products' needs."

U.S. Manufacturing Brings Quick Turnaround Times

FMI manufactures chips in the U.S. and exports them worldwide. Its manufacturing capabilities in San Diego (Calif.) and Gresham (Ore.) range from front-end wafer fabrication to assembly operations.

"We need U.S. manufacturing," stresses FMI's Rich Christopher. "Local autonomy is the key to providing customers shorter turnaround from design to product."

Customers want more computing power, more communications power," says President Mitsumasa. "We have to offer our customers a way to take advantage of Fujitsu's manufacturing and engineering

Fujitsu's R&D And Customer Cooperation Drive Cutting-Edge Technology

Fujitsu spends more on R&D than most companies make in total sales. This

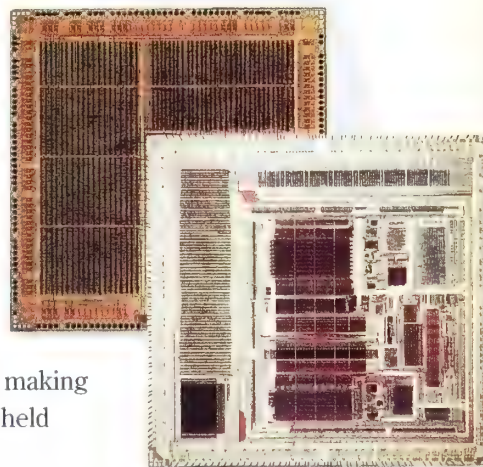
investment often brings advances in microelectronics that evolve into commercial products.

High electron mobility transistor (HEMT) technology is one example. By significantly improving reception, HEMT helps reduce the size required for a satellite dish, making direct broadcast satellite TV more attractive to consumers.

Another example is high-speed gallium arsenide semiconductors. Fujitsu was the first to use gallium arsenide technology in manufacturing a key semiconductor module for cellular telephones, making supercompact handheld phones possible.

Now, Fujitsu has opened the world's largest gallium arsenide chip-fabrication facility, in response to a growing demand for this technology. Convex Computer Corp. is using these Fujitsu components to build the next generation of faster computers.

Says Ashida: "We have to demonstrate our value to our customers. We have to provide products, technological solutions and services that can help them be more competitive, now and in the future. If we do this, everyone wins."



Fujitsu designs advanced semiconductors, such as Ethernet controllers (left) and RISC microprocessors (right), in the United States and markets them worldwide.



Graph Exec. VP Howard Sachs (second from right), his engineers and their FMI counterparts discuss chip development for Graph's fast new engineering workstation.



Fujitsu Supports International Understanding

The Japan-America Institute of Management Science, popularly known as JAIMS, provides intercultural, graduate level education for students from both sides of the Pacific Rim, and beyond.

Founded by Fujitsu in 1972 as a non-profit, independent educational institution, JAIMS creates opportunities for Western and Japanese managers to learn from each other about business and management styles in a unique, cross-cultural setting.

During its first 20 years, more than 10,000 people from over 40 countries have participated in JAIMS' academic program and seminars.

For more information, contact: Japan-America Institute of Management Science, 6660 Hawaii Kai Drive, Honolulu, Hawaii 96825. Telephone: (808) 395-2314 Facsimile: (808) 396-7111

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Information Systems Group

3055 Orchard Drive
San Jose, California 95134-2022
(408) 432-1300; Fax: (408) 456-7054
Researches and develops a broad range of computer products and ports application packages to the Fujitsu UNIX® environment

Supercomputer Group

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FUJITSU BUSINESS COMMUNICATION SYSTEMS, INC. Headquarters

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Anaheim, California 75081
(714) 630-7721; Fax: (714) 764-2527

Sales, Marketing & Service

4605 East Elwood Street
Phoenix, Arizona 85040
1-800-533-3263; (602) 921-5900
Fax: (602) 921-5999
Designs, manufactures and markets an advanced line of PBX (private branch exchange) systems for 30 to 9,600 lines, including the ISDN-architected F9600™

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Conducts basic electronic interconnect research for computer systems

FUJITSU COMPUTER PRODUCTS OF AMERICA, INC.

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Advanced Products Division and Cooperative Ventures Division

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DOING IT RIGHT, TILL THE LAST WHISTLE

Craig Parr keeps morale—and quality—high in a doomed GM plant

Craig B. Parr, manager of GM's Pontiac-West assembly plant, is in his element. Striding through the plant's four buildings, his abundant gold jewelry twinkling in the artificial light, he draws waves and smiles from all around. But for Parr, 49, the job is bittersweet. Pontiac-West will close its doors for good in 1994, and it is Parr's difficult responsibility to wind the place down. It can be frustrating and infuriating work. In the late 1980s, when he had to close down the nearby Pontiac-Central plant, "I'd go home and bust my ass around the house just to get the poison out of my system."

Soon, many of his fellow plant managers will see how it feels. Beset with money problems, General Motors Corp. plans to close 21 plants and eliminate 74,000 jobs by mid-decade. At each of those plants, managers such as Parr will have the crucial task of closing up shop while making sure everything runs smoothly until the final whistle. Having just lost \$4.9 billion, the last thing GM needs now is a bunch of disgruntled workers doing shoddy work.

Because of Parr's experience in plant closings, his views have been much in demand among GM plant managers lately. Many have shown up on his doorstep. "I've become the encyclopedia that people refer to," he says with a shrug.

NO PENNANT. His peers should listen carefully. Look at the quality charts posted alongside the engine-preparation line at Pontiac-West, where workers attach various hoses and electrical connectors to the engines' mechanical parts. In June, 1990, just before workers learned the plant would close, only 71% of the engines leaving the department were found to be perfect by GM standards. Last January, 97% of the engines were perfect. University of Michigan business school professor Kim S. Cameron, who has studied plant closings, compares the plant manager's role to that of a baseball manager: "The manager has to let people know that even though it's the last game of the season and the team is not going to win the pennant, you

still have to run out the ground ball."

Much depends on top management as well. If workers feel the rug has been pulled out from under them, the stress and shock are certain to affect their work. GM has made some questionable moves, such as announcing it would close either its Willow Run plant in Michigan or the facility in Arlington, Tex., and then letting them compete against each other. Arlington won, and Willow Run's workers are still bitter. Its hometown of Ypsilanti, which had given GM tax breaks, is suing the company.

To its credit, the company does support its blue-collar workers with an extensive safety net. It includes free job training and a chance to transfer from one GM plant to another, based on seniority. Workers who are laid off for any reason get 95% of regular pay for up to 36 weeks—and 100% after that—until the end of their contract in September, 1993. "Our members are worried, as they should be," says Donny Douglas, president of United Auto Workers Local 594, which includes Pontiac-West. "But they're not in a state of desperation." Salaried employees are generally on their own, as GM seldom offers buyouts

**'EVEN THOUGH YOU'RE
CLOSING, YOU KEEP
DEMANDING HIGHER
STANDARDS'**

for them. But for now, employees who will be 53 or older this year or next are being offered an enticing early-retirement package.

Although GM management is reluctant to single out Parr as its plant-closing guru—perhaps because it's painful to admit needing one—the company has tacitly acknowledged his accomplishments at Pontiac-West: Usually, a doomed plant is allowed to continue



building its current cars or trucks until the gates are locked. In an extraordinary move, Pontiac-West this April will begin building the \$27,000, 280-horsepower GMC Syclone pickup, previously built in Shreveport, La. "You just continue to demand results," explains Parr. "Even though you're closing, you keep demanding higher standards."

ON THE TRAIL. Parr's philosophy on plant closings traces back to 1986. Soon after he became the manager of Pontiac-Central, he learned he was to shut the sprawling, 9,000-worker facility. He uncovered a brutal reality: "The world doesn't let the company treat you, your plant, or your workers as lepers," he says. Parr was fairly new to the plant-closing business then, so there weren't many plant managers for Parr to turn to for advice. He began keeping a log at home of what did and did not work in helping the labor force through the transition (table). For instance, he noted that big employee meetings were much less effective than smaller ones. The main lesson: "When you're closing a plant, you can't get people enough information."

He likes to give it to them in person. A muscular former welder who even today is a member of the Teamsters, Parr arrives at work by 6 a.m. and gets through his mail while sitting in the cafeteria, where he is accessible to all 2,000



PUTTING
FACTORY

and white-collar workers. Then he takes the trail. Marching through the factory, he scowls at an unswept stairwell, grins when a worker stops him to ask, "How are orders?"

Putting his head into the cafeteria, he asks whether the broken soda cooler has been fixed yet. It hasn't. "You let me know if they don't get here, O.K.?" He tells a cafeteria worker. Next comes a visit to the front-axle department, where a worker has reported that her neighborhood letter carrier has complained about a problem with a dashboard light on her GM truck that the dealership can't fix. "Tell her to park it for a week or two," says Parr. By the end of the day, he vows, they'll solve the problem. They do.

That act of concern for the customer is out of the ordinary at Pontiac. At the end of the line, workers slip a thank-you note into the glove compartment of every GMC Typhoon utility they build. Signed by Parr, the unusual card also includes his direct phone number. If there's a problem, Parr wants to hear about it. Now, he hopes to put similar notes in all GM plants.

Like some plants that are set to close, and many that aren't, Pontiac doesn't look the least bit run-down. The areas are spotless, and there's

fresh paint everywhere. "That plant will not deteriorate," insists Parr. "I have a budget for paint, and I spend every penny." The paint is designed to show the work force that somebody still cares, as are the plant tours by schoolchildren and major customers that he encourages.

When GM sends a Scrooge-like message to employees, Parr goes on the attack. He insisted that the annual Christmas party go on as usual after GM tried to cancel it, for instance. At one point, he went to the GM brass for approval for a new piece of diagnostic equipment for the trucks built at Pontiac-Central. When they balked at its six-figure price tag, he found the money elsewhere in his budget and bought the equipment. "If I show the work force that I haven't abandoned them, they're gonna hang in there with me," says Parr. Workers on the floor give him good marks. "In the 26 years I've been here, he's the most people-oriented manager," says Don Dugliss, who works in final assembly.

'DIGNITY AND PRIDE.' Unlikely as it seems, GM maintains that quality often improves at doomed plants. At GM's Lordstown (Ohio) commercial van plant, which closed on Mar. 23, the last two GM-run quality audits found an astounding zero defects, says Thomas J. Davis, vice-president and general manager of the GM's Lansing Automotive Div. The

THE PARR PRINCIPLES

Craig Parr's rules for managing plant shutdowns, learned over six years

COMMUNICATE Give notice as far in advance as possible—certainly before workers read it in the paper. Be thorough and repetitious, because they may not be able to absorb everything the first time

BE VISIBLE Take personal responsibility for guiding people through the change. Don't just have an 'open door' policy; wander around outside your office

BE HONEST False hope isn't helpful for anyone. Be blunt about the plant closing, even if you don't know the exact date

BE POSITIVE Reward top performers and implement worker ideas for improvements. Also, encourage plant tours by schoolchildren and customers. They imply that workers are worth showing off

DEMAND MORE Remind workers that improving skills will help the plant today and make them more marketable later

KEEP THE PLANT LOOKING GOOD Clean it, paint it. Don't let the equipment deteriorate. Morale is iffy enough already

DATA BW

North Tarrytown (N. Y.) plant learned in mid-February that it will close by 1995. An early March audit of minivans built there found a nearly 25% improvement in quality over the past three months, says one GM executive.

After studying more than 30 manufacturing plants hit by downsizings, Michigan B-school professor Cameron isn't surprised. "The data really show the same phenomena: Absenteeism goes down, productivity goes up," he says. Why? It may be denial on the workers' part—the belief that if they do a good enough job, management will reverse its decision. "You do the best you can and hope they change their mind," says Don Barlow, a worker on the Pontiac-West frame line. "That's all we can do." Some of it is pride. At Lordstown, workers strung up a banner reading: "We're going to build out with dignity and pride."

As the Pontiac-West workers get ready to build the new GMC Cyclone, there's no forgetting that the final whistle is just two years off. Perhaps as many as one-third of the blue-collar workers will take early retirement rather than try to transfer to another GM plant. At least one employee can feel confident about his future, though. With plant closing becoming a growth business, Parr ought to be in hot demand.

By James B. Treece in Pontiac, Mich.

A 'GRAVE DANCER' TRIES TO PICK HIMSELF UP

Will new deals erase the memory of Sam Zell's misstep at Itel?

Famed bottom-fisher Samuel Zell has landed a couple of whoppers lately. Paying 47¢ on the dollar, the Chicago real estate tycoon scooped up 80% of the debt of bankrupt Carter Hawley Hale Stores Inc. last October. He hopes to convert the debt into 90% equity ownership during the retailer's reorganization. In February, Zell cut a similar deal with Revco Inc.'s debtholders. Zell Chilmark, his \$1 billion "vulture fund," should wind up with about 18% of the drug-store chain.

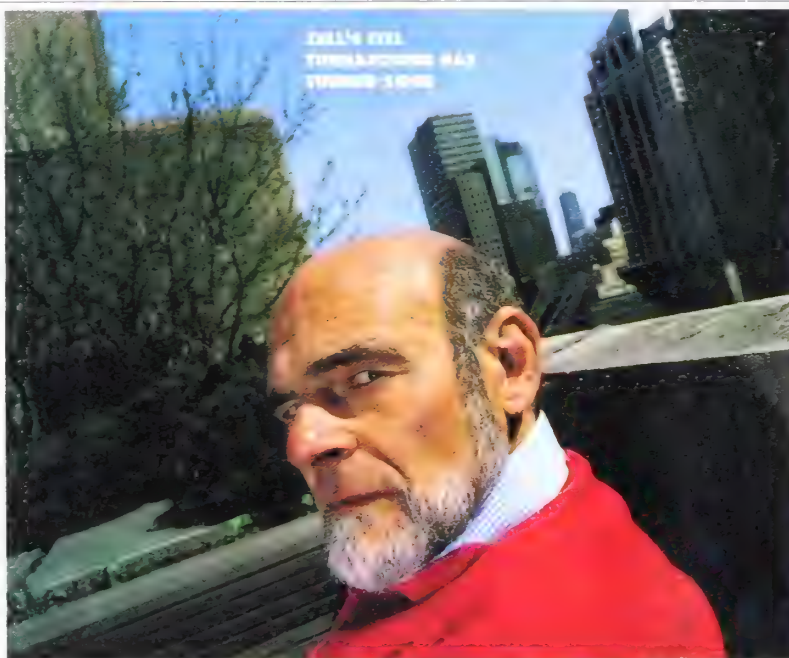
In both cases, Zell's image as a corporate savior helped him succeed. But now, as he steps back into the spotlight, the self-proclaimed "grave dancer" is not exactly doing a jig. The reason: Zell's highest-profile turnaround, the makeover of former computer lessor Itel Corp., is turning out to be a bust.

After furiously unloading assets to cut Itel's 1990 debt of \$3.2 billion, often at money-losing prices, about all that's left is its Anixter Bros. Inc. wiring business and a few short-line railroads. With Itel's size and prospects much diminished, Zell has hurt his stature as a master dealmaker—and done nothing for his bank balance. Shares in Itel, at nearly 30 three years ago, now trade at around 18¢. Zell, Itel's chairman and its largest shareholder with 31%, would not comment.

ABOUT-FACE. At the least, Zell's humbling experience at Itel may have taught him some tough lessons he can put to use at Carter Hawley Hale and Revco. Chief among them: the need to stay flexible. Rather than cling to his dreams of building a transportation empire, Zell wisely started selling assets before it was too late. His about-face proved critical for investors. "To his credit, he was able to get out from the situation with-

out equity- or bondholders having to take a hit," says Brian Carrico, portfolio manager of Pilgrim Group's High Yield Trust, which owns \$500,000 in Itel notes.

Zell took control of Itel in 1985, after getting a board seat and forcing out previous management. He borrowed heavily to expand Itel into a \$2.1 billion operator of a half-dozen businesses, including railcar and container leasing, marine dredging, and cable wiring systems. Then everything began to come unglued.



FIRE SALE AT ITEL

MARCH, 1991 Itel sells 3.8 million shares in American President Cos., losing \$22 million. Later, it persuades an outside group to buy 6.9% of Itel at \$12.63 a share, a loss for Itel of \$12.1 million

JUNE, 1991 Itel sells Itel Distribution Systems, a warehouse company, for \$32 million. Itel breaks even on this unit, pieced together over three years

OCTOBER, 1991 Itel unloads its 15% stake in Santa Fe Pacific for \$240 million, a loss of about \$30 million. It sells Great Lakes Dredge & Dock for \$165 million in cash, losing some \$20 million

Not only was Zell caught flat-footed when leveraged balance sheets fell out of favor, but his much-vaunted ability to spot bargains seemed to have failed him.

The trouble began in 1988, when Zell agreed to pay \$1.2 billion in cash and stock for Henley Group Inc.'s leasing operations and its 17% stake in railroad giant Santa Fe Pacific Corp. Itel also acquired Signal Capital Corp., a \$300 million investment portfolio. Around the same time, Zell began accumulating a 20% stake in shipper American President Cos. From the day he took the helm, Itel's holdings in American President and Santa Fe lost money. And since Signal's investments are made up mainly of subordinated junk debt in small companies, Zell has been unable to unload most of those holdings.

WRONG TIME. His biggest blunder, however, came in mid-1990. That's when he agreed to buy back Henley's 38.5% stake in Itel over 12 months at prices ranging from \$18 to \$22 a share. Zell may have been trying to prop up the stock price, but it backfired. Coupled with big interest and principal payments due, that descent the stock down to 7¢ in late 1990. "The stock buyback was a big drain on cash at exactly the wrong time," notes Carrico.

Zell bought Itel some breathing room in early 1991 when he sold its container-leasing business for \$825 million, pretax gain of \$250 million. Still, crimped by the recession and the need to dump more assets, Zell had to settle for small losses or the best breaking even on other divestitures. He

plans to do still more whittling. "I'm basically turning Itel into Anixter," he told BUSINESS WEEK early this year.

Now, Zell is moving on to Revco and Carter Hawley Hale. He and partner David M. Schulte will sit on both boards, says Schulte, a former Salomon Brothers investment banker. Executives from both retailers insist that they're not concerned about Zell breaking up their companies or piling on debt. "Sam has a genuine long-term interest in this company," says CHH Chairman Phil Hawley. Adds Schulte: "Sam doesn't tend to sell things." Unless, as at Itel, he leaves himself no alternative.

By Lois Therrien in Chicago, with bureau reports

DATA: BW COMPANY REPORTS

IS AMERICA'S WORK FORCE BANKRUPT?

Many business leaders believe the answer to that question is a frightening "Yes." They perceive a lack of commitment, a lack of maturity, and the inability to absorb training to be an alarming trend much of today's youth.

That perception isn't necessarily reality. Consider the people who have served in the Army.

Army enlists quality people.

The Army believes America's youth belong in school. Army recruiters are strong advocates for good study habits and high school completion. We believe it pays off.

Over 98 percent of new recruits are high school graduates. Over two thirds score above average on the Armed Forces Qualification Test, a standardized aptitude test.

Our smart new soldiers then become students in the nation's largest technical training organization. At 18 major technical training complexes, the Army trains young adults in over 300 specialties, many that involve high-tech equipment and state-of-the-art technology. It is a system that graduates over 100,000 men and women each year.

Transferable skills.

Researchers at Ohio State University found that 50 percent of the people recently separated from the Army had transferred the occupational skills acquired in the military to their civilian employment. This was slightly better than the rate of skill transfer by graduates of business schools and vocational/technical colleges. But beyond occupational skills, soldiers acquire other lifelong qualities.

As a matter of fact, a survey of hundreds of employers, many from Fortune 500 companies, clearly shows that they value the attributes soldiers develop in the Army and will hire young people who are reliable, disciplined and have responsible attitudes toward work.

How the Army Career and Alumni Program helps America.

This year about 150,000 men and women will leave the Army. As they return to civilian life, they bring with them self-discipline, motivation, and technical skills America's work force needs. To help them get a head start on their civilian careers, the Army established the Army Career and Alumni Program (ACAP).

At ACAP Centers around the world, the Army provides training in job search skills for soldiers and their families. Besides facilitating their entry into the civilian world, the ACAP program prepares soldiers to make immediate contributions in their new civilian jobs.

How ACAP can help your business.

While ACAP serves the needs of the soldier, it's also a resource for employers across America. Interested employers may enter their firms into the Army Employer Network Data Base and find out more about ACAP by calling 1-800-445-2049.

It makes sense to support Army recruiting and Army Career and Alumni. The Army will continue to recruit and train high-quality young men and women because they are the key to maintaining America's defense. And the Army will continue to return to the civilian sector capable, mature, highly-motivated young people, ready to Be All They Can Be as part of America's work force.





WHEN WE DECIDED TO RECYCLE

On March 3, 1991, a large explosion in Detroit signaled the end of the old Chrysler assembly plant on Jefferson Avenue. A mere 10 months later, a brand new Chrysler plant opened. And it has one thing in common with the old plant—the address. Our new Jefferson North facility is part of an ongoing commitment to keep jobs in Detroit, and America, and to provide the vehicles on the roads of America.

This commitment was made by a completely reinvented Chrysler, a





E STARTED WITH DETROIT.

pany that believes that in the car business, you either lead, follow or get out of the way. That's

we invested one billion dollars to make this one of the world's leading "lean production"

ties, where people with an average of 26 years of production experience received an additional

000 hours of training to build the new 1993 Jeep Grand Cherokee. Environmentally, it's one

e cleanest plants in the world, with the most extensive recycling program in the auto industry.

will give something back to the community besides jobs. Which is only right, since the plant

is reusing a part of Detroit.

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THE LUCIE SHOW: SHAKING UP A STODGY IBM

Multimedia manager Fjeldstad typifies Big Blue's fiery new breed

As a kid growing up on a cattle ranch in California's Sierra Nevada, Lucie J. Fjeldstad learned early what it meant to get your hands dirty. If the cows needed milking, she would grab a milking stool and pail. Summer vacations found her on the seat of a tractor. But Fjeldstad was a girl, after all, and hard work could never win her a place on the Little League baseball team. Complain as she might to the boys, her only recourse was "sitting on the bench and pouting," she recalls.

These days, things are different. After years of hard work, Fjeldstad has muscled onto one of the most buttoned-down boy's teams in America. One of only three women among the 76 corporate officers at IBM, she's in charge of about 1,000 employees as vice-president and general manager of its multimedia business. Her mission is to figure out how Big Blue can best capitalize on technology that melds video, sound, and digital information.

It's a first-string job, but Fjeldstad still is frustrated. While she got used to battling male chauvinism long ago, she has found a formidable new opponent: IBM's hidebound corporate culture. Through multimedia, Fjeldstad sees the computer business rapidly converging with television, telecommunications, and consumer electronics to create a golden age of computer-driven entertainment and education. Breaking into consumer markets where IBM has little experience requires a major commitment, and Big Blue seems to be dragging its feet. "[Lack of] imagination is our worst problem," she says bluntly. That's tough talk for an

IBMer. But Fjeldstad, 48, is a member of a new generation at IBM—a group of fortysomething managers who have suddenly found themselves with more authority since Chairman John F. Akers announced his big restructuring in January. Gone is a cadre of older top executives, including former head of IBM world trade C. Michael Armstrong, who was considered Akers' heir apparent. If anyone is to smash through the sluggish bureaucracy that has bogged down Big Blue, this group of Young Turks is it.

Fjeldstad, for one, can draw on a long

history of breaking down barriers. She enrolled in Santa Clara University during the first year the school went co-ed. "It took courage to come to a previously all-male school, especially back then," says Paul L. Locatelli, president of the university, where Fjeldstad is now vice chairman of the board of regents. She credits playing women's basketball at Santa Clara with teaching her a lot about competition and leadership. "I learned passing and blocking and pushing and shoving," she jokes.

EARNING STRIPES. It has taken all of that and more to rise through the ranks at IBM. Fjeldstad joined the company's Silicon Valley laboratory in 1968 as one of its few female computer programmers. She married an IBM marketing executive, Bob Fjeldstad, and the couple settled down to raise his son by a former marriage. By 1977, however, she got the call from headquarters and moved the family to Westchester County, N.Y. Bob took early retirement last year.

Fjeldstad rose steadily through the management ranks, and by 1983, she became the first woman ever to head up an IBM development laboratory. In charge of 900 engineers, she earned her stripes there by getting a new mainframe out on time and improving its quality. That led to a tougher assignment in 1986: As the head of eight development divisions, she cut personnel and senior management by 25%, while reducing the amount of time it took to get the products out the door. At the end of her reign there the employees, only half jokingly, presented her with a sledgehammer.

Her aggressiveness won her the vice-president slot in 1988. That meant not only a cushy corner office in White Plains but also direct access to IBM's top decision-makers. Fjeldstad plays down that she's one of the highest-ranking women in the company, now and doesn't believe in using her position as a platform to criticize IBM for its dearth of female leadership. Hard work, she insists, got her where she is. "Maybe there just aren't other women who are ready yet," she says.



FJELDSTAD'S FORMULA FOR IBM

To stay competitive, Lucie Fjeldstad believes that IBM must:

- ▶ Shake up IBM's corporate culture by bringing in more executives from outside the computer industry
- ▶ Deliver on Chairman John Akers' promise to make some business units managed independently of the parent corporation
- ▶ Offer new incentive plans that grant bonuses to employees of the business units that post strong profits
- ▶ Completely exit the businesses unessential to IBM's future

DATA: EW

le who have worked for Fjeldstad
er high marks for leadership and
s. In an annual Employee Opinion
of senior executives last year,
red above 90%, when the average
was about 60%. "That is exception-
se days," says Larry McKinney,
ported to Fjeldstad at the time
ored about 70% on the same sur-
especially because there is much
tisfaction now with senior execu-
han when IBM was flourishing in
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Corporate Vice-
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group and now heads IBM's
on unit.

ststad suggested to IBM President
o. Kuehler that he come down to
a to see the stuff in action.
er was so impressed he gave her
ahead to make a presentation at a
g of IBM's Management Commit-
nich is run by Akers. Fjeldstad put
er a two-hour multimedia presen-
complete with music, video, and
computer graphics. The top brass
owed. "They asked me to turn IBM
multimedia company," she says.
er said than done, especially when
es to pushing IBM into markets
d on Joe Consumer. The promise
timedia is in merging the capabili-
PCs, TVs, and compact disk play-
eldstad, in fact, sees the personal
ter and television eventually meld-
o one machine. With your remote
d, you could order and store a vast
of movies, music, and periodicals.
ould simply watch and listen or,
s, mix things together to create
nized "info-tainment."

in the industry, IBM is renowned
reakthroughs in multimedia re-
and development. Educators rave
complex systems that use comput-
ideo, and sound to bring history

lessons alive. The products, however, are
way too pricey for the consumer market.
As rivals Sony, Philips, and AT&T move
aggressively with multimedia products
for the masses, IBM is stuck in the mud.
"These guys are coming right up our
tailpipe," says Fjeldstad.

HOLLYWOOD SHUFFLE. IBM's problem is
manifold: Having focused on business
customers for years, it lacks other retail
channels, is a high-cost producer, and
has few entertainment or software prod-
ucts to feed its machines. Jumping into
consumer markets, Fjeldstad thinks, will
require an entire cul-
ture change, for which
she has plenty of pre-
scriptions (table).

In the meantime,
she's exploring alliances
with several unlikely
partners—movie stu-
dios, electronics mak-
ers, and publishing com-
panies. Fjeldstad has
been spending ample
time in California lately,
trying to forge partner-
ships with executives
from Disney, MCA, and
Time Warner. She also
has been visiting with
such Hollywood power
brokers as Michael
Ovitz, George Lucas,
and Steven Spielberg.

While little yet has
come of such talks, IBM

is hammering out a new multimedia
joint venture with Apple Computer Inc.
Called Kaleida, it is designed to come up
with standardized multimedia software
for a wide range of computers and con-
sumer electronics gear. Problem is, Ap-
ple can't teach IBM how to produce low-
cost gadgets, and it can't provide access
to entertainment software. The reticence
and foot-dragging at headquarters over
noncomputer industry alliances leaves
the door open to such companies as
Sony, which already has a big film li-
brary and record catalog to couple with
some aggressively priced CD players that
display pictures and text.

Fjeldstad doesn't like to criticize IBM's
top brass publicly. But she suggests
that some of the people at Big Blue just
don't get it. "You can't often do
things in a new way with the same peo-
ple who did it the old way," she says.
"We need people willing to marry the
left brain with the right brain." Chal-
lenging the IBM establishment is typical
of Fjeldstad, says education chief Dezell.
"Those pushing the edge are always
frustrated," he says "But any organiza-
tion that doesn't have a Lucie is in
trouble."

*By Evan I. Schwartz in White Plains,
N. Y.*

1	Exxon
2	General Motors
3	Mobil
4	Ford Motor
5	IBM
6	Texaco
7	E.I. du Pont
8	Standard Oil (Ind.)
9	Standard Oil of Cal
10	General Electric
11	Gulf Oil
12	Atlantic Richfield
13	Shell Oil
14	Occidental Petroleum
15	U.S. Steel
16	Phillips Petroleum
17	Sun

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the price.**

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Coalition for Literacy



AFTER STEWART PONTIAC IN WEST PALM BEACH, FLA., SLAPPED FIRM PRICES ON 1992 MODELS, SALES TRIPLED DESPITE A DROP IN ADVERTISING

WHAT'S THIS —CAR DEALERS WITH SOULS?

Forget the hard sell. Auto makers want satisfied customers, and customers want to quit haggling

Two years ago, Dan Rossmiller's car-shopping went awry. First he test-drove a Laser at a Plymouth dealer in Madison, Wis., then a salesman showed him to a small, windowless office. After 15 minutes of haggling, the manager walked in to step up the pressure. "It was the whole good-cop, bad-cop thing," says an annoyed Rossmiller, who left without buying.

But last fall, Rossmiller tried again—and had a pleasant surprise at a local Saturn dealer. The salesman showed him an SL2 sedan and—wonder of wonders—encouraged him to comparison-shop. And when Rossmiller decided to buy, there was no haggling in an airless cell. In fact, there was no haggling at all. Rossmiller simply plunked down the sticker price of \$14,200 and walked out satisfied. "I felt real good knowing somebody else wasn't going to walk in and get the same car for \$1,000 less."

Car shoppers have long dreaded the

hard-sell tactics practiced in many auto showrooms (table). But with few alternatives open to consumers, dealers felt little pressure to change. Now, though, the success of customer-friendly brands, such as Toyota's Lexus on the high end and Saturn at the entry level, is fueling a reform movement in car retailing. Car-makers from Hyundai Motor America to Ford Motor Co. are constructing ways to simplify pricing and reward salespeople for actually satisfying customers.

'MOROCCAN BAZAAR.' Of course, it's hardly time to nominate dealers for collective sainthood. But the need to woo customers is more compelling than ever. In the U.S., more than 600 different car models jostle one another for buyers. Auto companies are desperate to stand out in this mob, and better dealers could be the way. "We cannot continue to treat the customer the way we have for the past 20 years and be successful," says Richard E. Strauss, president of

the National Automobile Dealers Association (NADA).

One simple improvement is to end haggling, which can leave customers angry and bewildered. Among Saturn dealers, negotiating is largely out, thanks to a policy of sticking with suggested retail prices that still leave a \$1,200 profit per car for dealers. In Saturn showroom options are packaged together into a few simple choices. The intent is to "avoid the Moroccan bazaar atmosphere" of traditional car-buying, says Donald V. Hudler, Saturn's vice-president for sales, service, and marketing. Last year, Saturn sold more cars per dealer than any other nameplate, the first time since 1976 that an American brand topped the models.

Saturn isn't alone. Three years ago, Ford tried out a one-price strategy for Fiestas in Italy. This tactic, says Ford, helped boost Ford's market share there eight points, to 12%. So last fall, Ford

the same program with Escort in a S. markets, nudging its share up 3% to 3.3%. Now, Ford is going all in with the plan, which offers a base price of \$10,899 on four Escort models with such popular options as radio and air-conditioning. Ford is urging dealers to stick to that, though some still are horse-trading. Alexander J. Trotman, executive vice-president of Ford's North American auto operations. The program, successful, could expand to other models.

Individual dealers aren't happy for Detroit. J.D. Power & Associates reckons that there are more than 30 dealers trying some variation on the fixed-price, no-haggles approach. One is Earl D. Stewart, a Pontiac dealer in West Palm Beach, Fla., who last December said he had had enough of the old haggling. Says Stewart: "We've operated on the edge of credibility for a long time."

Stewart ditched his commission-based sales staff, hired salaried salesmen, and slapped low, nonnegotiable prices on every car on the lot. He also has his trade-ins auctioned off; they fetch more than he offered. The customer gets a check for the difference. So far, the response is good: Sales are up from 30 cars a month to about 90 in January and February. Stewart expects to sell about 110 cars in March, though he has cut advertising spending by 85%.

Dealers are applying nice touches to the program, too. Jack A. Terhar Jr., owner of Terhar Ford in suburban Denver, has a beeper to service customers, so mechanics can be sure to reach them any day with estimates or questions. Customers also get follow-up calls a few days after the repairs.

FAIR PAY. Getting most auto dealers to treat customers well will take structural changes, though. Until now, only sales and service managers at dealerships received any special training. The salespeople learned to haggle for commissions on the job, where they don't stay for long: The average turnover for car sales forces is about 50%.

Some companies, such as Volkswagen, have been testing programs to spread out commission payments over several years to keep salespeople in one place. Others, such as Infiniti and Hyundai, pay dealers extra according to how they rank on customer-satisfaction surveys. And almost every major auto maker is picking up the tab for at least a portion of training programs for dealer salesmen.

New companies, such as Saturn, Oldsmobile, and Infiniti, everyone from the

THE TACTICS DETROIT WANTS TO DUMP

SELLING THE PAYMENTS

Focusing discussions on the monthly payments to divert the shopper's attention from the total price of the car

THE SLAM DUNK

Negotiating a price that earns a huge profit on a sale to an unsophisticated and unsuspecting buyer



THE HEAVY TURNOVER SYSTEM

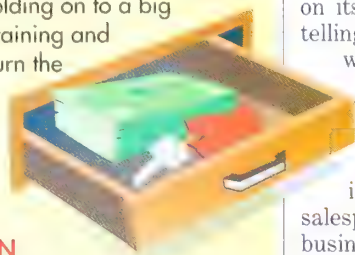
The highest in high-pressure tactics. Shopper is shown into a small, windowless "sweatroom" where a succession of salespeople wear down his or her resistance

LOW-BALLING

A comparison shopper is quoted an absurdly low price. After finding only higher prices elsewhere, the buyer returns to find sales manager won't approve the quoted price. Salesperson then negotiates a higher price

THE HULL-DOBBS TECHNIQUE

Named after two salesmen reputed to shine at this tactic. Basic goal: Make the shopper feel trapped until a sale is closed by holding on to a big deposit, or obtaining and refusing to return the keys to the customer's present car



STEALING THE TRADE-IN

Offering an extremely low price on the new car, but buying the customer's old car for a ridiculously low price. The trade-in then yields a big profit

THE PUPPY DOG

Let customer take car home thinking the deal is closed except for minor details. Customer, already attached to car, returns next day to find the "details" may include a jump in interest costs



DATA BW

owner down to cashiers and receptionists attends customer-service school. Infiniti customers receive a business card from each staffer they meet. Follow-up surveys pinpoint workers who need more training.

It's a more daunting task to reeducate established dealerships steeped in years of traditional sales techniques. This spring, Chrysler Corp. is kicking off a \$25 million program to educate 100,000 employees at the 5,000 dealers nationwide selling its brands. The training could be crucial to the success of Chrysler's new midsize sedans due in the fall, the Dodge Intrepid, Eagle Vision, and Chrysler Concorde. The cars are aimed at buyers who are more likely than Chrysler's traditional customer to buy imports. "We're going to see a new customer coming into the showroom," says Thomas C. McAlear, Chrysler's head of sales development.

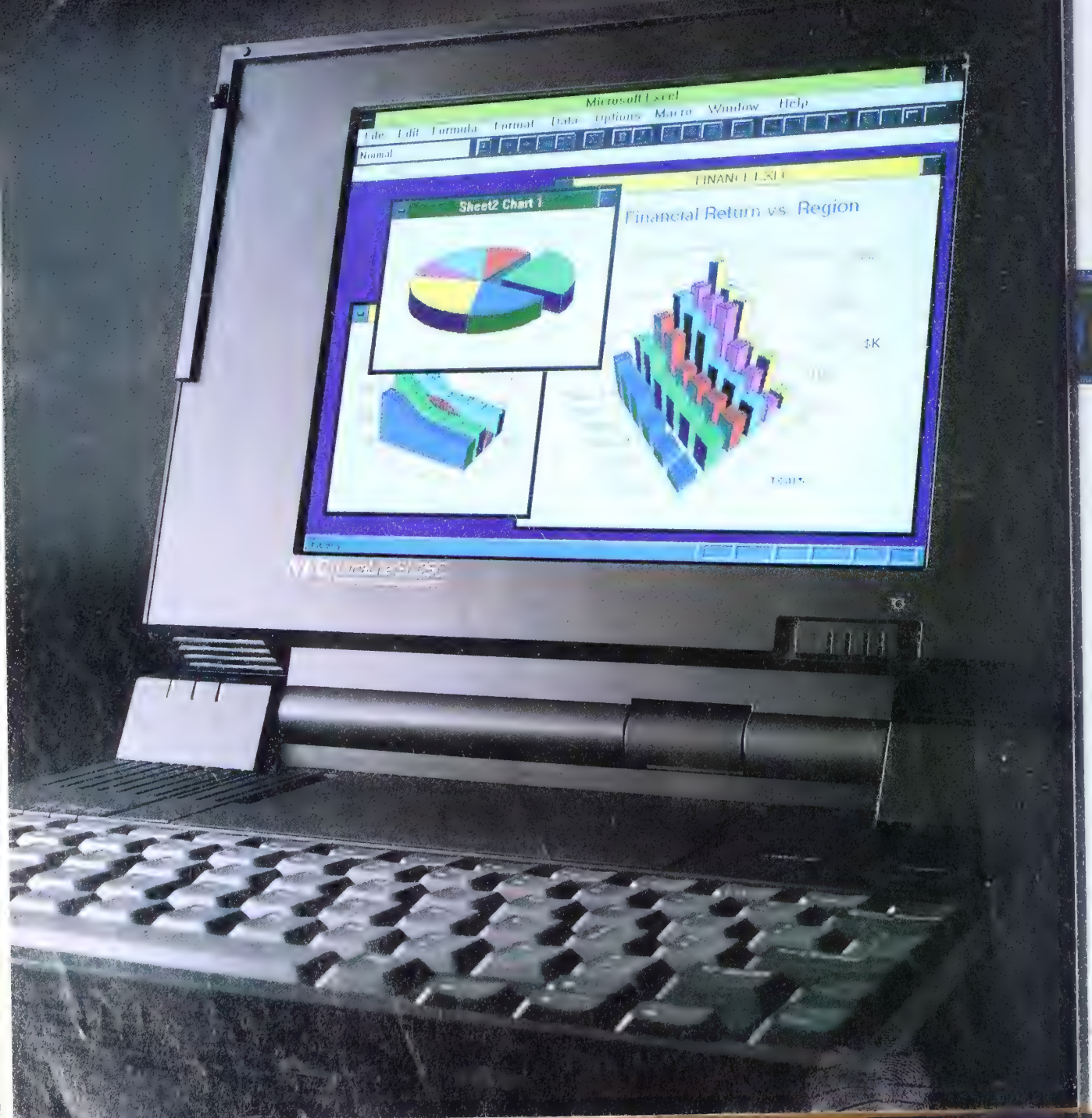
'MYSTERY SHOPPERS.' Much of Chrysler's program sounds like good old common sense. It will include tips from Chrysler's research showing that customers particularly resent gouging tactics such as sudden jumps in finance charges and mandatory service contracts. And it will teach new skills—such as selling to women as sentient adults. All too often now, "the salesman will say, 'Honey, get your husband, and we'll talk turkey,'" says Theodore Cunningham, executive vice-president for sales and marketing. After the program, Chrysler will send "mystery shoppers" to dealers to see how well the lessons have been learned.

Ford also is imposing new performance standards and training programs on its 7,000 dealers. It has just started telling dealers about the program, which will spell out everything from how many times a phone may ring before it's answered to how salespeople should treat customers. And the NADA has launched its first certification course for salespeople "to put ethics back into our business," says William A. Wolf, a Chevrolet dealer from Belvidere, Ill., who helped design the course.

This flurry of training won't transform the car-buying experience overnight. Dealers have often clashed with Detroit over the direction of car retailing, and many deeply resent what they decry as carmakers' efforts to interfere with their business. "We know better than they do," says Ron B. Tonkin, owner of 10 dealerships in Oregon. "We want to be in control of marketing the product." But at least the debate between Detroit and the dealers is showing service in the showroom for what it is: a crucial battleground for customers.

By David Woodruff in Detroit

Introducing the best notebook computer



color display in a computer. Ever.

In its review of our UltraLite® SL/25C notebook, *PC Magazine* said, "NEC is about to make the future of portable computing a whole lot brighter."

We couldn't agree more.

The best color display in a notebook. Ever.

The fact is, NEC is the first to offer an active-matrix TFT color screen in a notebook, and yet, in the words of *PC Magazine*, "its price tag rivals lower-quality passive-matrix offerings."

What's the difference

between active-matrix and passive-matrix color screens? One looks vivid, sharp and bright, like your desktop monitor. The other doesn't. One can be viewed from wide angles. The other can't. One is clearly the future of notebook computing. The other isn't.

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To quote *PC Magazine* once more, our SL/25C "has more going for it than just spectacular color. It's also one of the first notebooks to use Intel's new 25-MHz 386SL chip set."

The new chip provides all the processing punch of a 386 desktop PC. Offers intelligent power management for longer battery life. And runs even the most complex applications at

blazing speed. The 7.5 lb. SL/25C comes standard with 2MB of RAM (expandable to 10MB), an 80MB hard disk, internal floppy and 64KB cache. As well as MS-DOS® 5.0 and Windows™ 3.0, loaded and ready to run.

Just what exactly is active-matrix TFT display anyhow?

(Active-matrix TFT (thin-film transistor) display means that for each pixel on the screen, there is a tiny transistor. In the case of the SL/25C, that adds up to over 900,000 transistors covering the entire screen, forming the image. With each pixel controlled by its own transistor, the image is always in sharp focus, and far brighter than other screen designs permit. NEC has long been a world leader in display technology. And the SL/25C is one example of this.)

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A powerful argument for color, right here in black and white.

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feature—so the image you see on your screen can also be viewed on an external video device, like a big-screen projector. All of which makes one thing perfectly clear: the SL/25C is truly the ultimate presentation tool.

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NEC

INDUSTRIAL POLICY

CALL IT WHAT YOU WILL, THE NATION NEEDS A PLAN TO NURTURE GROWTH

Recessions end. And corporate executives and consumers alike are finding reasons for cheer in the latest upbeat economic numbers. Yet even as recovery begins to take hold, it's hard to shake a deep-rooted worry: that the American economy has lost its edge.

Whatever the causes, and there are many, the economy has turned in a dismal productivity performance for two decades. Consider this: Since 1973, output per worker has risen at only a 0.8% annual rate, compared with a 2.5% rate over the previous 25 years. Had productivity kept up with its earlier pace, today's median family income would be \$47,000 instead of its current \$35,000. At the same time, other industrial nations have been enjoying rapidly improving living standards. And these countries, especially Japan, have been laying the groundwork for even better times ahead by investing heavily in future productivity growth (chart, page 72).

Stagnant incomes and low productivity growth have dogged the U.S. economy for years. What's new is the waning of the cold war and the prospect of wholesale defense cutbacks, a combination which will knock a powerful prop out from under America's industrial base. But freed-up resources also offer a historic opportunity to get the economy back on a fast-growth path. That is why the cold war's end raises anew one of the most contentious questions in recent political history: Should the U.S. have an industrial policy to nurture and promote technology and industry?

The answer is "Yes." If the words "industrial policy" set off alarm bells,

call it a technology policy, a competitiveness program, or a growth agenda. Whatever the label, the U.S. needs an economic vision geared toward the global economy of the 1990s. Competitive advantage no longer belongs to the biggest or those blessed with abundant natural resources or the most capital. In the global economy, knowledge is king. And those nations that excel at creating new knowledge and transforming it into new technologies and products will prosper in years to come.

Government can become a key player in the knowledge economy. It should boost research spending across a wide range of technologies and offer hefty financial support to the next generation of scientists and engineers. The U.S. needs tax laws that make it a lot cheaper for the private sector to invest in research, development, and new equipment. Smaller companies should get technical assistance to learn the latest manufacturing techniques. The government can enhance productivi-

ty by building up the infrastructure, especially by encouraging the development of high-speed communications networks. And trade policy can focus on opening up foreign markets while resisting protectionism at home.

PAST GLORY. To some, adopting an industrial policy would be a colossal mistake. "We don't have any confidence in government policy that reallocates resources from one sector to another," says David M. McIntosh, executive director of Vice-President Dan Quayle's Council on Competitiveness.

But this growth policy has deep roots

in U.S. history. In the 19th century, the federal government backed the development of a transcontinental railroad by ceding huge tracts of land to get the job done. The government also sponsored a network of universities, extension services, and research to help U.S. farmers successfully reap the riches of a fertile land. And in this century, government funds nurtured such infant industries as airlines and electronics. Even the Reagan Administration pursued an ad hoc industrial policy, shoveling huge tax breaks at the real estate industry and laying the groundwork for such high-tech industries as biotechnology by funding basic research.

A knowledge-based growth policy doesn't call on government to pick winning and losing industries. Nor does it create ponderous bureaucracies or shelter stumbling companies from tough foreign rivals. And while the government may sow a lot of seed corn, it will be up to the private sector to risk its own money to develop commercially valuable ideas. It's the market that picks the winners and losers, not government.

This kind of policy builds on the cornerstone of American economic growth: individual achievement. U.S. science and technology have been propelled by the immigrant, the entrepreneur, the maverick thinker unwilling to wait for a consensus or committee assignment. Big superachievers do not stand alone. They can be successful only if the U.S. backs their research and ideas, as it did in the decade after World War II. "The best contribution government can make is support institutions which help support the creation of ideas," says Paul Romer, a leading theoretician of economic growth at the University of California at Berkeley. "There is a collective stake in the production of ideas."

Here are the elements of a knowledge-based growth policy:

■ **Spurring cutting-edge technology.** America's high-tech industries, such as

**THE BIGGEST COUNTRIES
OR THOSE BLESSED WITH
RAW RESOURCES AND
CAPITAL NO LONGER
HAVE THE EDGE. NOW,
KNOWLEDGE IS KING**





biotechnology, computers, and chemicals, are among the best in the world. Last year, the U.S. ran a \$37 billion trade surplus in advanced-technology goods, even as the rest of the manufacturing sector suffered a \$105 billion deficit. Better yet, high tech pays well. For example, in 1989, average annual compensation in high-tech industries was 22% higher than the average for all manufacturing, calculates Laura D'Andrea Tyson in her forthcoming book, *Who's Bashing Whom: Trade Conflict in High-Technology Industries*.

But there are worrying signs. If you take away aerospace, the high-tech trade surplus fell by 11% from 1990 to 1991 (chart). More troubling still, the U.S. has been spending only 1.9% of gross domestic product on nondefense R&D, both public and private, compared with 3% for Japan.

America's technological edge is melting away as other nations invest heavily in science and engineering. The competition for new ideas, products, and markets has never been more intense or important. "The growth in jobs and the standard of living tend to be governed by industries that have relatively high rates of research, development, and capital investment," says Jerry R. Junkins, chief executive of Texas Instruments Inc. Adds John A. Young, chief executive of Hewlett-Packard Co.: To boost technology, "what we need is something like a Desert Storm."

Technological breakthroughs are what really spur growth. Without major advances, even doubling net investment in plant and equipment raises the growth rate of real income by less than half a percentage point a year, according to most estimates. But throw in a jet turbine, a spliced gene, or a touchstone software program, and suddenly new markets, jobs, and opportunities open up. "In the long run, it's clear that it's ideas that drive growth," says Romer.

The payoff from boosting civilian R&D could be huge. Economic studies suggest the rate of return on R&D spending runs as high as 50% a year, if you include indirect benefits to the economy. For example, Xerox Corp. made little money from the pioneering computer work done at its Palo Alto Research Center in the 1970s. But out of that division came an entire generation of "user-friendly" computer technologies that made millions for Apple Computer Inc. and others.

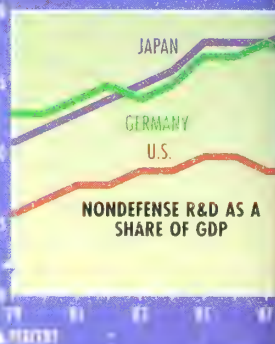
WHY THE U.S. NEEDS A POLICY FOR GROWTH

DATA: BLS, OECD, NSF, COMPETITIVENESS POLICY COUNCIL, U.S. DEPARTMENT OF COMMERCE

PRODUCTIVITY IS LAGGING...



...THE R&D GAP IS WIDENING...



The Bush Administration is beginning to recognize the economic importance of new technologies. Its 1993 budget proposes increasing nondefense R&D spending by 7%, to just over \$30 billion. The Administration is also pushing national weapons laboratories, such as Los Alamos and Lawrence Livermore, to focus more on commercially relevant research. But the funding increases are modest, and companies haven't yet been able to generate many commercially viable products based on technologies developed at the national labs. And a BUSINESS WEEK/Harris Poll shows that the American public strongly supports redirecting military research money into civilian R&D (page 76).

That's why Congress and the Administration should give a big funding boost to the National Science Foundation, the National Institutes of Health (NIH), and similar sci-tech outfits. The additional funds should be spread over lots of different ideas at the expense of such current big science projects as the \$40 billion-plus space station. The policy would rely on the well-established decentralized decision-making system of the scientific community, one of peer review. And because these agencies fund science in academia, any increases would feed more money into America's top research universities. In this way, the government diversifies its spending across a variety of technologies, like putting together a growth stock portfolio.

The NIH is a good model. The research it supports has brought an explosion of knowledge about biology and disease, spawning powerful drugs and an entirely

new industry, biotechnology. Yet most of the spin-offs of this taxpayer-funded science were unforeseen. "Every single thing in biotechnology can be traced back to basic research that didn't have any applications at the time," explains molecular biologist Russell F. Doolittle of the University of California at San Diego. That's why Doolittle firmly believes that the government must keep stoking the fires of invention. "If we don't, we won't have anything new 2 years from now," he warns. "We have to keep putting coal in the furnace."

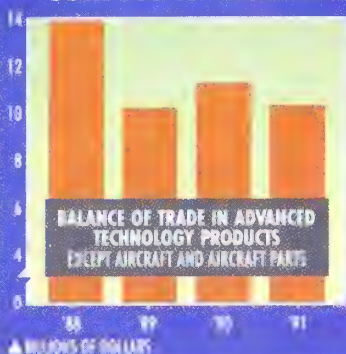
■ **Diffusing new technology.** More R&D spending is but the first step in a growth strategy. The government must also speed diffusion of technical knowledge and new manufacturing techniques, especially to the nation's smaller manufacturers. Some are among the



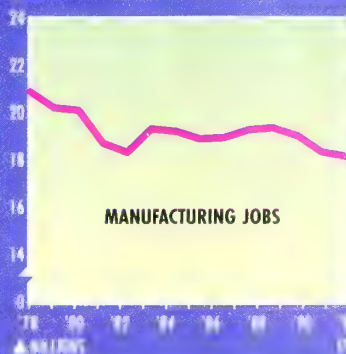
INVESTMENT FALLING SHORT...



...THE HIGH-TECH TRADE SURPLUS IS ERODING...



...FACTORY JOBS ARE SLIDING



technologically advanced companies in the world. But far too many of the 350,000 small manufacturing companies are lagging behind. To some experts, outdated manufacturing practices are pervasive and account for about "85% of the problems of American firms," says Charles F. Sabel, a political scientist at the Massachusetts Institute of Technology. To help small companies, 23 state governments are spending a total of \$50 million a year supporting 27 technology extension centers. The federal government is pitching in with several million more. That pales, however, next to the \$1 billion that Japan spends backing technology extension centers across the country, according to the federal government's Office of Technology Assessment (OTA).

To do more, the U.S. needn't look

overseas for guidance. History offers an incredibly successful example: the agricultural extension service. The federal government upped its support of farming with the 1862 Morrill Land Grant College Act. Almost half a century of increasing support led to the creation of the cooperative extension service in 1914. At that time, the U.S. trailed Europe in farming techniques. But a generation later, these investments paid off in enormous gains in agricultural productivity.

A few of the state industrial extension services are showing results. Georgia Institute of Technology, for example, has helped almost 3,000 companies over the past five years solve manufacturing-process problems. "We're trying to modernize Georgia manufacturing," says David H. Swanson, director of the Economic

Development Laboratory at Georgia Tech. Pennsylvania's industrial research centers have been successfully honing the technical skills of its many Rust Belt manufacturers (page 75).

But the state programs need more federal support to expand. The OTA estimates it would cost up to \$480 million a year to run industrial extension services similar to Georgia's in all states. By contrast, the agricultural extension program now costs about \$1.2 billion. Such extension programs

are the logical place for helping manufacturers upgrade the skills of workers and for offering smaller companies low-cost loans for new equipment.

The federal government is also a splendid bully pulpit. For example, the Commerce Dept.'s Malcolm Baldrige National Quality Award, which was set up in 1988, has been extraordinarily successful in spreading the quality-management revolution. Whenever possible, the government should "press and prod industry to move to a higher plane," says Michael Porter, a professor of business administration at Harvard business school.

■ **Creating a new infrastructure.** Take a drive around New York or Los Angeles, and it won't come as any surprise that the U.S. has neglected its infrastructure. Public infrastructure spending is down from 2.3% of gross domestic product two decades ago to 1.3% in the 1980s. The cost isn't just in lost tempers and missed appointments. It affects the bottom line. According to estimates by David A. Aschauer, an economist at Bates College in Maine, approximately 50% of the falloff in productivity growth—from an average of 2.8% a year from 1953 to 1969 down to 1.4% from 1970 to 1988—can be blamed on a lower rate of public investment.

Clearly, government needs to refurbish decaying roads, harbors, and bridges. But in the 1990s, building up a communications infrastructure that can support the information-intensive industries of the 1990s is critical. A communications conduit made up of fiber-optic cables and high-speed digital switching equipment, which is being developed by such companies as Bellcore, the research arm of the Baby Bell phone companies, could have an economic impact such as the interstate highway system did in the 1950s and 1960s.

The U.S. has started such an information superhighway to make it easier to manipulate and transfer huge amounts



INSPECTING
PROTOTYPE
COMPUTER CHIPS
AT BELLCORE: TAX
LAWS MUST MAKE
IT CHEAPER FOR THE
PRIVATE SECTOR TO
INVEST IN R&D



of data at high speed. But so far, only \$400 million has been budgeted for constructing high-speed data links between universities and government research labs. That is not enough, especially since many small companies won't get any benefits unless the government offers telephone companies and their competitors incentives to expand the data superhighway.

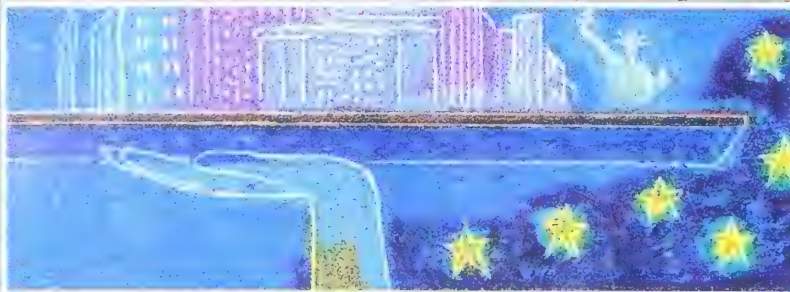
■ Technology education.

What America's college graduates do will determine in large part how fast the U.S. economy grows. The more young people who pursue careers in science and engineering, the better the odds that society will develop technologies and products that fuel economic growth. And in our entrepreneurial economy, a lot of the innovators will end up building their own companies, creating jobs and incomes. One study, by economists Andrei Shleifer, Kevin M. Murphy, and Robert W. Vishny, estimates that if an extra 10% of university students went into engineering—a doubling of the current engineering enrollment—the growth rate of the economy

would rise by 0.5% a year. By contrast, if law school enrollment doubled, the growth rate would fall by 0.3% annually.

These days, the U.S. economy isn't "graduating enough scientists to fill the need of the coming decades," frets Charles C. Leighton, senior vice-president for administration, planning, and science policy at Merck & Co. "That's a real concern." The government should address the glaring weakness in science and math in primary and secondary schools. It should also subsidize the education of more engineers and scientists. As companies and government hike research, development, and investment spending, the demand for these graduates will soar.

■ **Free trade at home and abroad.** A country that is taking care of business at home has little to fear from free trade.



A GROWTH POLICY FOR THE '90s

RESEARCH AND DEVELOPMENT ▶ Boost federal spending on civilian, nonspace R&D from its current \$20 billion a year. Support a wide range of projects, from basic research to new manufacturing technologies. Cut defense R&D from its current \$43 billion a year

TECHNICAL ASSISTANCE TO INDUSTRY ▶ Increase federal funding for state industrial extension programs to help smaller manufacturers adopt up-to-date technologies and production methods. Provide training grants and low-cost equipment loans

INFORMATION ▶ Improve data collection on R&D and manufacturing practices of foreign competitors. Continue to identify emerging critical technologies that need support

INFRASTRUCTURE ▶ Rebuild existing infrastructure, such as roads and bridges. Increase funding for new types of infrastructure, such as high-speed data networks, to encourage new high-tech industries

EXPORTS ▶ Expand the Export-Import Bank to make export financing easier to obtain for creditworthy small and midsize exporters. Boost export promotion efforts for nonagricultural products

EDUCATION ▶ Raise funding for all levels of science, mathematics, and engineering education

TAXES ▶ Make the research and investment tax credits permanent, so companies can do long-range planning

Despite intensifying foreign competition, the government should ignore calls for protectionism. Indeed, the past five years have seen the beginnings of an important transformation in the U.S. economy: Overseas trade has contributed about 30% of real growth in the economy since the trade deficit peaked in 1986. The collapse of communism in Eastern Europe and the Soviet Union means many more potential customers over the next decade. The proposed North American Free Trade Agreement would create enormous opportunities for U.S. companies, too. "And free trade keeps the pressure on domestic industries to innovate and create a productive economy," says Porter.

But it's a two-way street. The U.S. should help companies gain access to foreign markets. For one thing, it can

provide more small companies with export financing from the Export-Import Bank in Washington. In addition, the government can spend more time and money promoting American exports by expanding trade missions overseas. The U.S. spends only around 50¢ per capita on export promotion, compared with \$1 in France and \$5 in Japan, according to the National Association of Manufacturers.

While the U.S. has dramatically improved its trade balance with Europe, the deficit with Japan has started growing again. The record clearly shows that the world's second-largest economy is inhospitable to too many American companies. For example, Giddings & Lewis Inc., now America's largest machine-tool builder and a fierce competitor, hasn't sold a major machine in Japan since 1974. And that's not for lack of trying, says Chairman William J. Fife Jr. The Administration, its trade negotiators, and Congress should keep on pushing, nudging, and bashing for ever more market access, playing hardball when needed. "We

absolutely have to succeed in terms of securing reasonable trade with Japan," says Richard W. Heimlich, director of international strategy for Motorola Inc.

■ **Investing in new technologies.** In the past, U.S. companies have been slow to take advantage of new technologies coming out of labs. "All this crap in Washington about industrial policy and funding generic technologies makes no difference if CEOs don't make a commitment to bringing new technologies to market," says Donald N. Frey, professor of industrial engineering and management sciences at Northwestern University and former chief executive of Bell & Howell Co.

But as the economy moves from recession to expansion, the climate for investment will be better than it has been in decades. U.S. companies are no longer

by a higher cost of capital than foreign rivals. U.S. hourly labor is among the lowest in the industrial world. To speed both innovation and investment, government should subsidize permanent the research and incentive tax credits. This way, the private sector assumes the greatest financial risk, but the government also lends a helping hand. Says Intel Corp. Chief

Executive Andrew S. Grove: "I'm not looking for a handout, but a turbocharge."

The new growth agenda will not come cheap. Done right, the cost could add up to billions of dollars, which won't be easily found at a time of gaping budget deficits. But unlike other federal spending, over the long run, this industrial policy will boost productivity and living

standards, generating plenty of tax revenues to more than pay for itself. It's the best investment America can make.

By Christopher Farrell and Michael J. Mandel, with Karen Pennar in New York, John Carey in Washington, Robert Hof in San Francisco, Zachary Schiller in Cleveland, and bureau reports.

BW/Harris Poll appears on page 76.

SMALL BUSINESS HAS A FRIEND IN PENNSYLVANIA

Believe it or not, tiny Scheirer Machine Co. is the kind of company Pennsylvania officials had in mind when they hatched a new technology assistance program for manufacturers in 1988. Scheirer—a Pittsburgh company with 65 employees that makes replacement parts for steel and mining equipment—needed help to become more competitive, so it turned to the state-funded Industrial Resource Center in Duquesne, a Pittsburgh suburb. For a fee of \$3,000, a three-person staff of experts helped Scheirer reorganize its shop floor and raise productivity by about 15% in just six months. The center lent Scheirer \$150,000 at 5% interest to buy a computerized lathe. The company will get on-site assistance to upgrade technology further.

SMALL. Pennsylvania, like other industrial states, is making the economic importance of its small, nuts-and-bolts manufacturers. Through the 1980s, Rust Belt states pursued high-tech and automation jobs to replace losses from plant closings in such basic industries as steel and autos. States often went overboard, offering expensive tax and subsidy incentives to woo a limited number of huge manufacturing plants, often built by foreign companies.

Small industry turned out to be more resilient than big. In Pennsylvania, for instance, factory jobs declined during the 1980s—largely because of steel plant closings. But the number of manufacturing companies in the state actually increased during the decade by 10%, to more than 17,000. "The state's share of economic growth and job creation is going to depend on smaller entrepreneurs," says Andrew T. Bernberg, Pennsylvania's commerce secretary.

Other states agree. Budding

local industrial policies are geared toward preserving the stable, high-paying factory jobs. Ohio has a long-established technology transfer effort called the Thomas Edison Program. Georgia and Maryland both have top-notch programs to assist manufacturers.

But Pennsylvania's package of initiatives stands out as the most comprehensive policy effort yet. The state spends about \$9 million a year to staff a network of eight regional resource centers, such as the one providing help to Scheirer. Under the decade-old Ben Franklin Partnership, state money is aimed at nurturing startups. And just last month, the state started lending more low-interest money for modern-

ization to companies that pay above-average wages. "There is a model brewing here," says Bennett Harrison, economist at Carnegie Mellon University. "They're focusing on the real competitiveness problem."

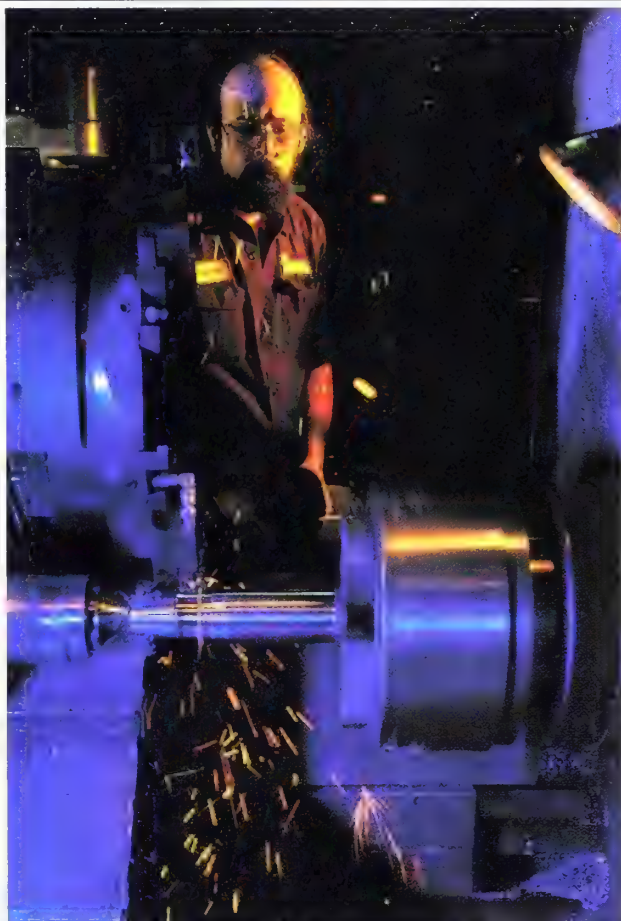
Indeed, as Japan and Germany have proved, big companies can be globally competitive only if they can count on suppliers for high-quality products at reasonable prices. And many small U.S. manufacturers know they have a lot of catching up to do when it comes to quality and productivity.

More and more of them are benefiting from state programs. Piad Precision Casting Co. in Greensburg, Pa., needed access to the latest technology

and production methods to remain competitive. So it linked up with the Southwestern Pennsylvania Industrial Resource Center, one of the largest and best-funded centers. Piad, which has 95 employees and \$10 million in annual sales, supplies electrical components to major equipment producers, including General Electric Co. and Asea Brown Boveri. With standards ever rising, says Karl Schweisthal, president of Piad, "our objective is to be a world-class manufacturer by the end of 1995."

The Pennsylvania program has some critics. With limited funding, the centers tend to work with the stable and creditworthy. Struggling manufacturers who need the most help don't get much assistance, beyond seminars. "We are not a turnaround operation," says Barry G. Maciak, managing director of Southwestern Pennsylvania Industrial Resource Center. Still, by providing access to new technologies, such as states as Pennsylvania are giving many small manufacturers a new way to compete.

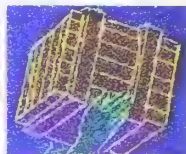
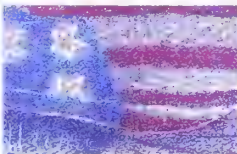
By Michael Schroeder in Pittsburgh



SCHIEIRER: THE STATE'S CENTER FINANCED A COMPUTERIZED LATHE

TIME FOR UNCLE SAM TO PITCH IN?

Americans are worried about the U.S.'s position in the global economy and increasingly gloomy about their children's future. But they're divided over what to do. Al-



though they strongly oppose an industrial policy that would have the government picking winners and losers and are tepid on incentives for business, they favor spurring R&D.

INDUSTRIAL COMPETITIVENESS

■ How concerned are you that U.S. industry is becoming less competitive in the global economy?

Very concerned	57%
Somewhat concerned	32%
Not very concerned	5%
Not at all concerned	5%
Not sure	1%

CHILDREN'S FUTURE

■ Do you expect your children will have a better life than you have had, a worse life, or a life about as good as yours?

	March, 1992	August, 1989
Better life	34%	59%
Worse life	29%	10%
About as good	33%	25%
Not sure	4%	6%

PICKING WINNERS?

■ Governments in other countries take a more active role in picking, investing in, and helping industries that they think are important to their long-term prosperity. Do you think the U.S. government should do this, or should decisions about which industries to invest in be left to the free market?

U.S. should pick, invest in, and help selected industries	31%
Decisions should be left to free market	60%
Not sure	9%

WHERE TO HELP

■ In order to spur economic growth, do you think the federal government should:

	Should	Should not	Not sure
Grant tax credits for a wide variety of investments by business?	46%	46%	8%
Let companies deduct the costs of their plants and equipment more quickly?	53%	38%	9%
Increase government spending to help businesses develop new technologies, such as computer chips?	53%	44%	3%
Grant tax credits for research-and-development investments?	70%	25%	5%

POLICY CHOICES

■ Do you favor or oppose the following proposals?

	Favor	Oppose	Not sure
Limiting imports to protect U.S. companies and workers from foreign competition	64%	34%	2%
Preventing foreign companies from buying U.S. companies that have developed new technologies	45%	51%	4%
Providing cheap government financing to U.S. companies that want to export products or services overseas	52%	43%	5%
Providing technical or marketing help from the government to U.S. companies that want to export products or services overseas	60%	36%	4%

PEACE DIVIDEND

■ Now that the cold war is over, do you think the savings from cutbacks in military spending should or should not be used for each of the following? And which one of these would you favor the most?

	Should	Should not	Not sure	Favor most
Cutting the budget deficit	74%	23%	3%	28%
Cutting taxes	60%	37%	3%	22%
Retraining defense workers to work in other industries	76%	21%	3%	18%
Redirecting military research and development money into civilian R&D	77%	20%	3%	14%
Helping defense industries convert to commercial manufacturing	66%	30%	4%	12%
Not sure				6%

WHAT TO FUND

■ Would you favor or oppose the government's spending more money on each of the following if it meant that your taxes had to be increased to pay for it?

	Favor	Oppose	Not sure
Building and repairing roads and bridges	51%	47%	2%
Improving public-school education	77%	22%	1%
Educating more engineers and scientists	42%	57%	1%

Edited by Mark N. Vamos

Survey of 1,253 adults conducted Mar. 11-17, 1992, for BUSINESS WEEK by Louis Harris & Associates Inc. Results should be accurate to within 3 percentage points.

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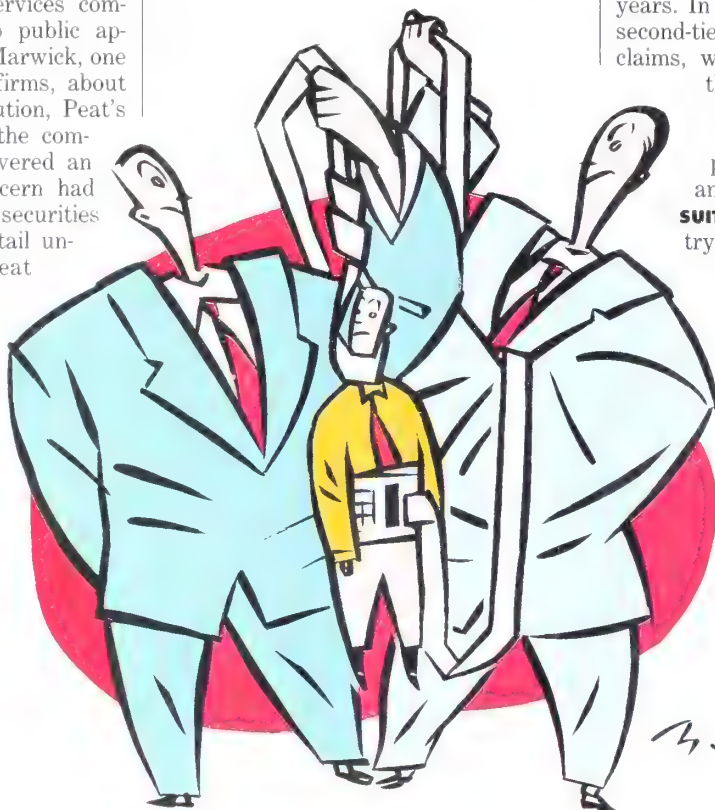
THE BIG SIX ARE IN BIG TROUBLE

Litigation in the wake of the S&L scandal is crippling accountants

Recently, a financial-services company planning to go public approached KPMG Peat Marwick, one of the Big Six accounting firms, about doing an audit. As a precaution, Peat's own investigators checked the company out. When they discovered an outside investor in the concern had served jail time for violating securities laws 17 years earlier—a detail underwriters had missed—Peat turned the company down.

These days, accountants can't be too careful. Their firms—indeed, the entire profession—are under siege. As the dragnet for culprits in the financial debacles of the 1980s continues, accountants face claims of more than \$2 billion in damages, and regulators are preparing lawsuits demanding millions more. Private litigants are suing, too. Most of the Big Six firms face or have settled cases involving major financial hits (table). The impact of these actions could extend to Corporate America: Some companies may be unable to get a competent auditor.

CHOSEN FEW. Accountants are not the only litigation targets. Government regulators shocked lawyers recently by extracting \$41 million from the prestigious New York law firm of Kaye, Scholer, Fierman, Hays & Handler for its role in the \$2.6 billion failure of Lincoln Savings & Loan Assn. But the actions against accountants could be far more devastating. While thrift failures involved hundreds



A BARRAGE OF BIG HITS

COOPERS & LYBRAND One defendant in \$300 million lawsuit by Florida regulators alleging Coopers, as auditor for Guarantee Security Life Insurance Co., failed to detect "phantom" transactions. Coopers is contesting the charges

ERNST & YOUNG Defendant in an SEC complaint asserting that predecessor firm Arthur Young filed misleading audits at Texas-based RepublicBank. The SEC says Young compromised its independence. Ernst & Young is disputing the suit

ARTHUR ANDERSEN Agreed to pay up to \$30 million to settle investor claims from the collapse of Lincoln Savings & Loan Assn. Andersen last year settled similar federal charges that could cost up to \$25 million

DELOITTE & TOUCHE One defendant in a California insurance regulators' suit charging fraud and negligence in the audit of Executive Life Insurance Co., which collapsed from junk bond investments. Deloitte is contesting the charges

KPMG PEAT MARWICK Target of a \$100 million suit by Resolution Trust Corp. alleging misleading audits of failed Pennsylvania thrift, Hill Financial Savings Assn. Peat says its 1988 audit cited problems with Hill's financial statement

DATA BW

of law firms, most of these institutions were audited by one of the Big Six.

The ability of these firms to take a blow is in question. Insurance premiums for the Big Six have soared to fold since 1985, while maximum coverage has been cut in half. Settlements in the range of \$20 million to \$30 million, which are common, are not fully covered by insurance. For some firms, premium and legal costs eat up to 25% of what would otherwise go to partners.

Some experts believe that one or more Big Six firms could fall in the next few years. In 1990, Laventhol & Horwath, a second-tier firm facing \$2 billion in claims, went out of business. "This is the biggest crisis the profession has faced in its history," declares John W. Hill, assistant professor of accounting at Indiana University.

SUIT FITS. In response, firms are trying to guard against future shocks. Sources say Ernst & Young will audit only banks that receive regulatory highest ratings. Another major firm will not touch on government-security dealers. Others avoid carefully screen small companies, which are often the target of lawsuits when they fail to meet investors' expectations. Firms are especially leery of companies that have fired auditors. Warns Peat Marwick partner Michael Conway: "There will be some companies that cannot get an audit at a price."

If the ranks of accountants continue to shrink, and if the profession shies away from new audits, it would raise profound questions about the system of independent auditing that the Securities & Exchange Commission and investors have relied on for nearly six decades. The alternative would be government auditors: a prospect that nearly everyone dreads. "It's the best interest of shareholders that we have a viable accounting profession," says Jan A. Kaitz, a vice-president of the Financial

Institute, which represents financial officers of 7,000 companies. "A good accounting profession is not in anyone's advantage."

They contend that many of the problems are self-inflicted. When the buyout-and-merger craze of the 1980s shrank the client pool, critics say, some firms sometimes turned a blind eye to questionable activity to hold on to clients. "Accountants didn't cause the crisis," acknowledges Representative William Wyden (D-Ore.). "But had they sounded enough alarms for regulators, the losses could have been significantly less."

When accountants respond they are being scapegoated by bureaucrats trying to shift the blame away from regulations and by investors searching for pockets to cover their losses. They say they must rely on informal management, which is somewhat faulty. When there is fraud, "auditors are as much the victim as the perpetrator," says Wayne W. Smith, a partner at the law firm of Dunn & Crutcher, a Los Angeles law firm that represents Deloitte & Touche. But, he concedes, "people are not forgiving of auditors."

DEFENSE. To fend off future litigation, accountants are lobbying state legislatures for laws limiting plaintiffs to attorneys' fees only in the office where the fraud was performed. And they are lobbying Congress for a law to limit liability to a firm's degree of responsibility. If auditors may have to foot the bill, even if they were bit players in their client's fraud, Deloitte & Touche is part of a group that is being sued for \$200 million by Lincoln S&L's shareholders, although Deloitte came on only five months before regularized Lincoln and had not conducted an audit.

Accountants are also trying to get their own house in order. Last year, the member American Institute of Certified Public Accountants voted to re-audit auditors to state unambiguously whether they had "substantial doubts" about whether a client could continue as a going concern for the following 12 months.

And last summer, the group of members from accepting loans from financial institutions they were auditing. That move came weeks after the SEC filed a complaint against Ernst & Young alleging that it had filed misleading audits for Dallas's RepublicBank. The bank claimed the firm was complicit in a \$21.8 million in loans the bank made to Ernst partners.

Cleaning up may help forestall future lawsuits. But the Big Six will have their hands full for some time dealing with the allegations from the past.

By Dean Foust with Tim Smart in Washington

PRECIOUS METALS

GOLD STILL ISN'T MUCH OF A PROSPECT

Even at \$337 an ounce, it could drop further. And it's no inflation hedge

To investors who have bought gold in the past five years, the precious metal has brought nothing but grief. Now, as gold plunges through the \$350-per-ounce floor to a six-year low, analysts say that at today's prices gold is a real bargain.

If you feel as if you've heard that before, it's because you have. Last December, with gold at \$360 an ounce, analysts were talking about bargain-hunting and pointing to the metal's limited downside. Now, with gold hovering around \$337, down 6% from the year's start, it might look tempting to jump in. But gold prices could fall further. With the end of the cold war, much of the geopolitical tension that used to fuel its price has been defused. And since gold throws off no interest and has carrying costs to boot, it's expensive to invest in the metal even if the price doesn't go down.

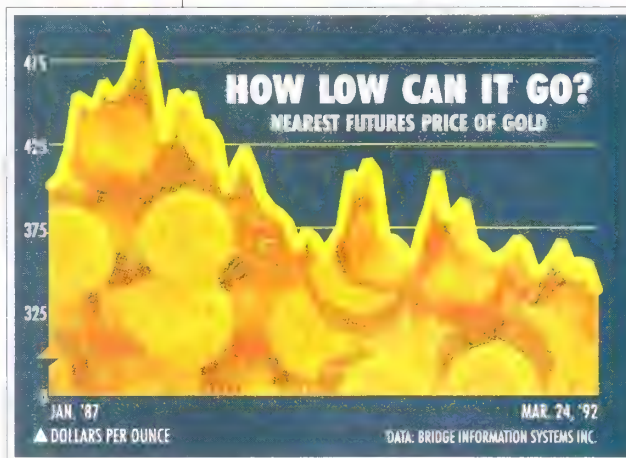
One of gold's biggest draws has been that, unlike paper assets, its value rises as inflation heats up. Unfortunately for goldbugs, price and wage increases are trending down around the world. And inflation is projected to stay low for years. With interest rates running high—after adjustment for inflation—investors end up paying a steep price for holding gold. "When you get a real rate on long-term bonds of 5%, from a long-term point of view gold has a negative carrying cost of 5%," says August F. Arace, co-portfolio manager of the \$57 million Freedom Gold & Government Fund. Arace has 90% of his fund's assets in government bonds and just 10% in gold stocks.

'MUTED EFFECTS.' Even if one wishes to hedge against inflation, there are now better ways to do it. Ten years ago, if investors were concerned about the dollar or the price of oil, they would turn to gold. Today, financial futures let investors fine-tune bets on oil or the dollar. "Gold doesn't react to world events like it used to," says Edmund Serfaty, portfolio manager of the \$200 million United Services Gold Shares Fund. "It used to be that, with something like the Gulf war, gold would've been much higher.

But these things seem to have muted effects now, mainly because of currency trading and derivatives."

Investors who were playing gold by buying into Serfaty's mutual fund have been hit even harder than they would have been had they bought the metal itself. Over the past year, gold has fallen some 6%. But the United Services Gold Shares Fund is down 17%. And those shares will continue to fall if the price of gold doesn't stabilize.

How low can gold go? In 1982 and 1985, it dipped below \$300. "I don't rule

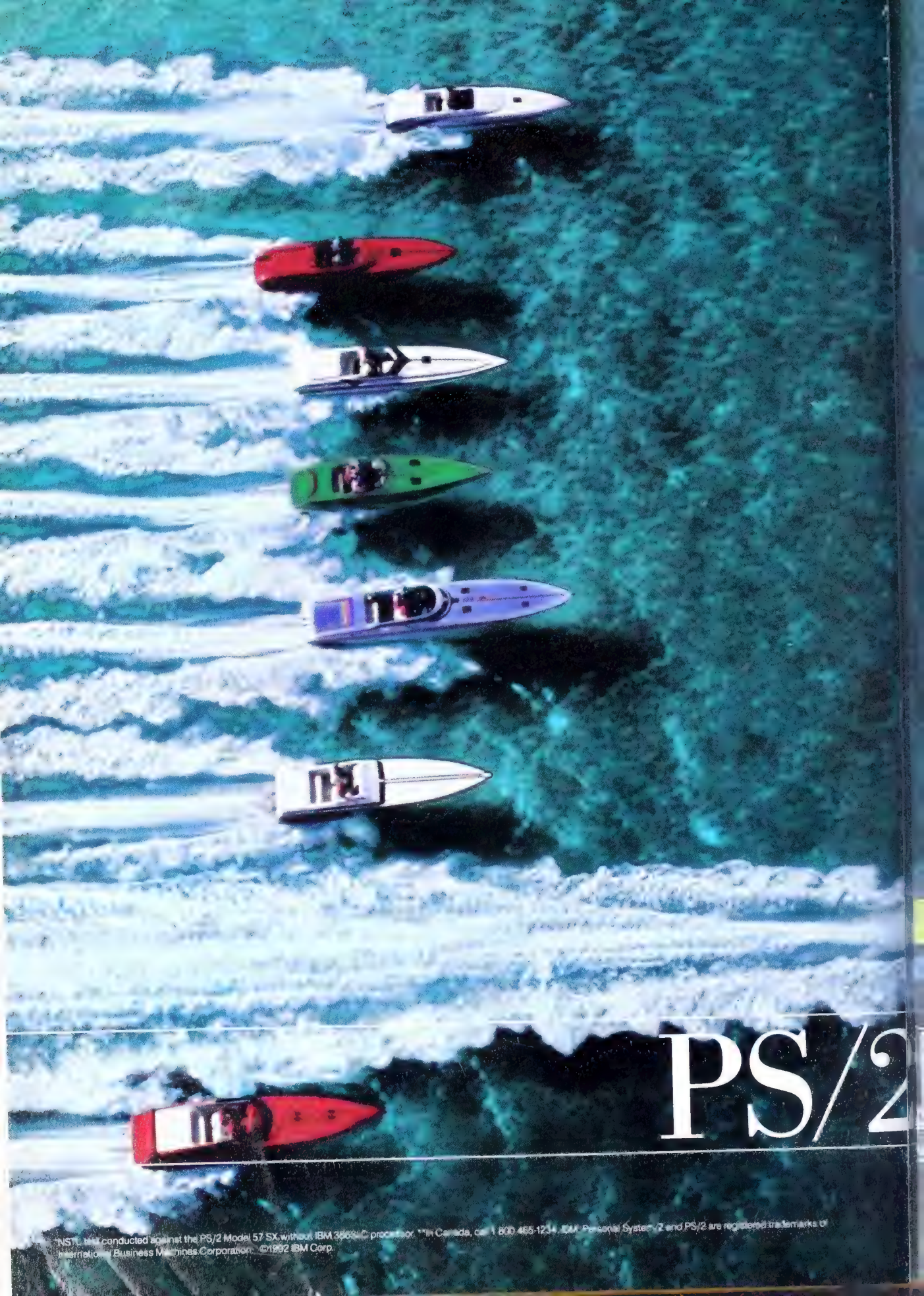


out that gold could go beneath \$300, on a very temporary basis," says Frederick Demler, PaineWebber Inc.'s minerals economist, who nonetheless is recommending buying the metal for the long run. But analysts note that the upside is limited, too. When analysts speak of trading ranges, they usually go no higher than \$400 to \$425.

NO BARGAIN. Some diehard goldbugs venture higher estimates. Harry J. Bingham, president of the \$120 million Van Eck Gold/Resources Fund, forecasts that the price will eventually head back to its early 1980s level, when it climbed to a high of \$875 an ounce. "There are fewer goldbugs, but the ones that are there are as steadfast as they used to be," notes Jeffrey M. Christian of CPM Group, a precious-metals consultant in New York.

It's true that contrarian investing has proved lucrative in the past. But with the fundamentals so stacked against gold, it's hard to see how a play on the metal, even at these low prices, can really pay off.

By Suzanne Woolley in New York



PS/2

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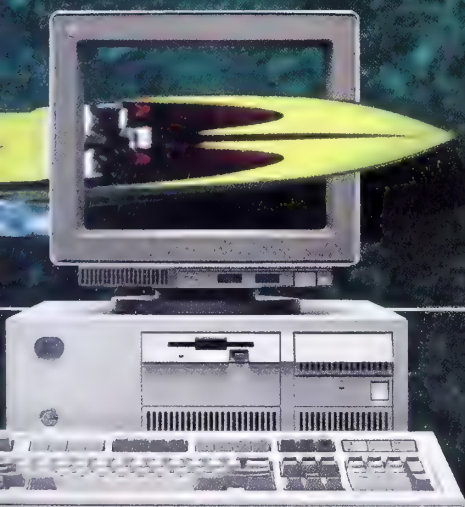
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HOME SWEET 8.8%: THE EZELLS "SHOULD HAVE LOCKED IN WHEN THE RATES WERE A LOT LOWER"

THIS HOUSING REBOUND LOOKS BUILT TO LAST

Buyers are a bit more optimistic, and the rate hike may be a blip

Lured by the sharpest mortgage-rate drop in years, Georgette and Ray Ezell began scouring towns along the Connecticut shore for a house late last fall. By Christmas, rates for a 30-year conventional loan had plunged to 7.75%. But an unexpected uptick in recent weeks (chart) put their search in high gear. On Mar. 17, they grabbed an 8.8% mortgage for a three-bedroom Cape Cod in Clinton, Conn. "We should have locked in when the rates were a lot lower," laments Georgette. The Ezells will pay an extra \$1,395 a year.

The jump in rates—now 9.1% nationally—has sent buyers like the Ezells scurrying for loan applications and sales contracts. Their purchases have fostered what appears to be a boomlet in residential housing sales. In San Francisco, sales of single-family houses were 24% higher in February, 1992, than in February, 1991. Granted, sales had stalled early last year because of the Persian Gulf war, but the increase is still impressive. "When interest rates moved up, people really got off their duffs," says Marie Dierks, a Coldwell Banker Inc. agent in the Houston suburbs. Pittsburgh's Janet and Glenn McGuire decided in mid-February to mull over a lender's quoted

rate—and woke up the next day to find it had climbed one-quarter of a point. They settled for the new rate in a hurry. Good thing, too: "Rates have gone up since," says Janet McGuire.

SHORT SPIKE. The increase, however, has not been so severe as to threaten turning the boomlet into a downdraft and squelching the market's slow recovery. Several factors augur well for the future: First, rates are nowhere near 1990's prohibitive double-digit levels. Second, consumer confidence is creeping back, especially outside the stricken Northeast. "It's not ebullient, though it's better than three months ago," says Leonard Miller, chairman of Lennar Corp., Florida's largest homebuilder, which boosted earnings 55% in 1991. And falling prices have made houses more affordable, especially for first-time buyers. In San Francisco, the median price tumbled from \$300,000 in February, 1990, to \$264,000 two years later. Industry officials are now believers: According to the Com-

merce Dept., February housing starts were 9.6% higher than in January.

Perhaps most encouraging for housing fans, the rate spike may be just a temporary phenomenon. Many predict that rates may retreat to about 8.5% by midyear. The Federal Reserve, which since mid-1991 has helped engineer a decline, is committed to keeping rates low, particularly in an election year.

SECOND CHANCE. The rate increase, beginning in early January, was spurred by signs of recovery and the resulting inflation willies. But the market is overreacted. Because of productive gains during recessions, inflation is seldom bad in the first year of a rebound. Once the markets digest this, analysts predict, 30-year Treasury-bond rates now at about 8%, will ease. So should conventional mortgages, whose spread over the long bond is around one percentage point.

All of which means that buyers should have a second chance this summer to get a low rate. Just how low, however, will vary by region. Demand is most robust in the Midwest, which wasn't hit so hard by the recession. Result: Lenders in the region will be under the least pressure to drop their rates.

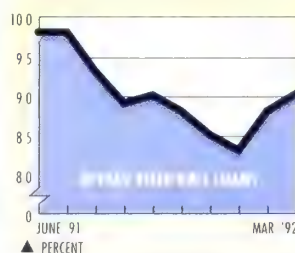
Refinancings of existing mortgages, exchanging more expensive old debt for cheaper new loans—will also have to await better days. "They've basically come to a crawl," says John J. Sousa, president of Commonwealth Mortgage Co. in Burlington, Mass., where refinancing had quadrupled in December and January.

Meanwhile, lenders expect those who can't wait for rates to ease—such as people who have to move for a new job—will turn to adjustable-rate mortgages. ARM rates, now running about 6.2%, haven't jumped as much, because they are tied to shorter-term Treasury notes whose rates have stayed relatively low. ARM rates are usually reset yearly. Hence, they are less popular than conventional mortgages, which offer the certainty of fixed payments.

Wherever the loans come from, the real estate industry is grateful for some good news. "Housing has led us out of every recession since World War II," says Lennar's Miller. Mortgage-rate fluctuations notwithstanding, the market should be the same in time around.

By Larry Light in New York, with Gail DeGeorge in Miami, Alice Cuneo in San Francisco, Resa King in Madison, Conn., and bureau reports

MORTGAGE RATES ARE BOUNCING BACK UP



L CLINTON, THE TERROR D TOAST OF WALL STREET

te his rhetoric, he has raised a mountain of cash in New York

When he finishes bashing George Bush and lambasting Democratic rivals, President-elect Bill Clinton often goes after favorite target: Wall Street. "I came to end the greed that consumed Wall Street and ruined our S&Ls in the last decade," he says.

Despite the rhetoric, Clinton has been surprisingly successful at courting Wall Street's big shots. One out of every four dollars he has raised comes from New York. A lot of it from Wall Streeters. \$2 million of his total \$8.5 million raised after his Connecticut primary. And by former California Governor Pete Wilson, Clinton is counting on money to enable him to win big in

friends. Despite his attempt to portray himself as an outsider, Clinton has financed his campaign by being the consummate insider.

The architect of Clinton's New York fund-raising is Kenneth D. Brody, a 48-year-old limited partner at Goldman, Sachs & Co. Brody is unfazed by Clinton's criticism of 1980s Wall Street. "Most people on Wall Street would agree," he says. "That was not Wall Street functioning properly." Brody helped raise \$40,000 from Goldman partners alone. For the February event, he helped recruit 28 co-chairs, each of whom agreed to raise \$25,000 (table). "If I had a Ken Brody working for me in every state, I'd be like the Maytag man

dent of Bloomberg Financial Markets, and Peter Tufo, partner at Lazard Frères & Co. All became fund-raisers.

Hillary Clinton, a Wellesley and Yale Law School grad, has her own old-girl network. Wall Street lawyer Susan Thomases, a close friend of the Clintons and a former top aide to Senator Bill Bradley (D-N.J.), held a reception for Hillary attended by some 300 female civic, legal, and financial leaders.

MONEY FROM HOME. Not all of Clinton's financial backers work on Wall Street. A key supporter is Warren A. Stephens, CEO of Little Rock-based Stephens Inc., a private investment bank. Many Stephens family members and employees of Stephens-family-owned properties such as Arkansas Oklahoma Gas Co. and Worthen Banking Corp. contributed the \$1,000 maximum and together gave about some \$50,000.

Goldman Sachs also has ties to Clinton's home state. The firm underwrote a \$27 million bond issue for an Arkansas county in 1991 and a \$160 million issue in 1988 for a state authority. Goldman's political action committee supported



York's Apr. 7 primary. Before the New Hampshire primary, the Arkansas governor netted \$623,000 from a Feb. 10 fundraiser at the Sheraton New York for a record amount for a Democratic state at that early date. "Being able to raise money in New York has been essential in taking us from New Hampshire to this point," says Paul Brody, a Clinton finance director.

Did Clinton pull it off? The answer lies in his close ties to the pro-business, moderate wing of the Democratic Party, as well as his and his wife's skill in collecting well-connected

**GOLDMAN'S BRODY:
CLINTON'S NEW
YORK CONNECTION**

with nothing to do," says Rahm I. Emanuel, who heads Clinton's nationwide fund-raising.

Brody had a lot to work with. Some of Clinton's school chums prospered on Wall Street. Roger Altman, a fellow Georgetown University alumnus and now a Blackstone Group vice-chairman, is a major Clinton fund-raiser. On Jan. 20, Altman, Brody, and Roy L. Furman, chief executive of the brokerage firm Furman Selz, hosted a series of small meetings with Clinton at Blackstone's offices. Attendees included Theodore Ammon, a Kohlberg Kravis Roberts & Co. partner, Michael Bloomberg, presi-

FRIENDS ON WALL STREET

In addition to personal \$1,000 contributions, the legal limit, Clinton backers have enlisted other givers:

	Money raised
ROGER ALTMAN Blackstone Group	\$75,000
ROY FURMAN Furman Selz	25,000
ARTHUR LIMAN Paul, Weiss	25,000
ALAN PATRICOFF Patricoff & Co. Ventures	25,000
ROBERT RUBIN Goldman, Sachs & Co.	25,000
STANLEY SHUMAN Allen & Co.	25,000
MICHAEL STEINHARDT Steinhardt Partners	25,000
BRUCE WASSERSTEIN Wasserstein Perella & Co.	25,000

DATA: BW

Clinton's 1990 gubernatorial race. The firm is also a lead bond underwriter for Little Rock-based Wal-Mart Stores Inc., on whose board Hillary sits.

Despite his fund-raising success, Clinton faces money problems. His campaign has borrowed \$1.4 million and still has \$400,000 in campaign bills. Matching funds will cover that, but the check won't arrive until April. Good thing Clinton has six fund-raisers in New York in the next two weeks. To keep Brown at bay, he'll need more than a little help from his friends on Wall Street.

By Leah Nathans Spiro in New York and Paula Dwyer in Washington

BY GENE G. MARCIAL

THIS COMPUTER POWERHOUSE IS READY TO REBOOT

Compaq Computer is still reeling from its fall on Wall Street, and its once high-flying stock, which hit 74 a share in February, 1991, remains an outcast. After plunging as low as 22 in early December, the stock has attempted a feeble rally and is now meandering at around 27. Dismayed fans who once saw Compaq as a growth stock have abandoned the PC maker. But guess who's buying Compaq shares now? Value-stock investors.

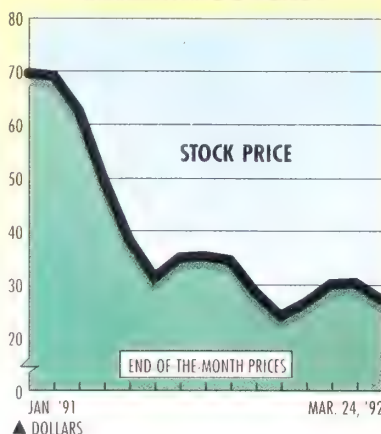
Value players usually avoid fast-lane companies such as Compaq. They focus instead on companies whose stocks are selling below their intrinsic, or private-market, values. They calculate the value by looking at how rich or cheap the stock's multiple is relative to such factors as cash flow and book value.

"Based on our business-value method of analysis, Compaq's intrinsic worth could exceed \$50 a share," says long-term value investor Mark Boyar, who manages about \$150 million. He thinks Compaq now has the managerial talent and strategy to effect a major turnaround. So he sees the stock hitting 80 in the next two to three years.

Recent acquisitions in the computer industry, notes Boyar, show stock multiples of more than 4 times book value and 11 times cash flow. Price-earnings ratios were between 17 and 38. He figures that based on its current price, Compaq is now grossly undervalued, trading at just 1.2 times its book value of 22 a share, 4 times its 1990 cash flow of \$6.85 a share, and 5.4 times its estimated 1992 cash flow of \$5 a share. Compaq's current p-e is 18, Boyar says. **'A STEAL.'** "These multiples are near Compaq's lowest valuation ranges," says Boyar. Moreover, if the company's \$8 a share in cash and equities is deducted from the stock price of 27, "Compaq becomes even more of a steal at the adjusted price of 19 a share," he argues.

Boyar thinks the fundamental changes in the computer industry that bode ill for Compaq haven't permanently impaired the company. He says the company's repositioning of its personal computer division to broaden its product line to include low-cost, entry-level PCs will allow Compaq to compete head-on with the new market entrants

COMPAQ COMPUTER: STILL AN OUTCAST



DATA: BRIDGE INFORMATION SYSTEMS INC.

and "should get the company back on track."

Despite current earnings pressure, other value players are also impressed with the company's solid balance sheet. They note that Compaq has very little debt, with a long-term debt-to-capital ratio of only 3.8%. The company's financial strength, says another value investor, will enable it to push through a major restructuring. Compaq's financial strength, says another pro, means that it will be able to direct the necessary funds to the development of new leading-edge products.

BIG YIELDS FROM A FARMER'S FRIEND?

What \$5-a-share stock is catching the eye of such big value investors as Mario Gabelli and Odyssey Partners? Two clues: It just moved its headquarters from New York to Sioux City, Iowa, and it is neither tiny nor unknown but trades on the Big Board. Give up? It's Inspiration Resources, which sold its metals operations, Hudson Bay Mining & Smelting, last year and will soon change its name to Terra Industries.

The company, which had revenues of more than \$1 billion last year, is a niche player in the farm belt: It provides farmers with crop production and protection products, including fertilizer and seed, as well as support services.

"Inspiration is the best way to play the agricultural growth game," says one big investor. As the economy improves, so could farming activity, he says. Some 95% of Inspiration's sales comes from its Terra division.

This pro believes that as earnings improve over the next 12 months, the stock could double. Operating earnings increased to 27¢ a share last year from a loss of 52¢ in 1990. Earnings should rise to 35¢ this year and to 40¢ next year, says the investor, as the company benefits from increased corn planting. Earnings will also be helped by low natural-gas prices—an important factor in making nitrogen fertilizer—the company should keep costs down.

That's not all. Inspiration is 56% owned by Minarco, a Luxembourg-based company with major interests in mining and metals processing. One major investor believes Minarco will ultimately sell Inspiration substantially above its \$5-a-share price.

A LAB THAT'S IN THE PINK

In the past two years, probably no other pharmaceutical startup has linked as many alliance pacts with big U.S. and foreign drug companies as Columbia Laboratories. Yet its stock, traded on the American Stock Exchange, has been in the doldrums down from 10½ a share to 7 since January. One reason: Some analysts expect Columbia to report poor fourth-quarter 1991 earnings in a few weeks. But a few big investors aren't worried.

One bull is money manager E. Heubner, president of Chestnut Hill Management, which owns some 2% of Columbia stock. He sees 1993 earnings of 75¢ a share. Says Heubner: "If the deal with Warner-Lambert gets going fast, Columbia could earn \$1 in 1994."

Columbia has signed five marketing agreements—one with Warner-Lambert for its patented "bioadhesive" system of delivering drugs to mucous parts of the body, such as the mouth, stomach, vagina, or rectum. Warner-Lambert has exclusive marketing rights in the U.S. and Canada to Columbia's Replens, a nonhormonal product that treats vaginal dryness, a condition common primarily among postmenopausal women. Replens is also being sold in Europe.

But some pros are betting that Columbia's big hit will be its spermicide, which is expected to have substantial advantages over existing contraceptives in efficacy and duration. Columbia says its product will be effective for 24 hours. Says Heubner: "The spermicide, to be marketed next year, has the potential to be Columbia's blockbuster product."

Delta Air Lines' global strategy.

and how Columbia Executive Programs became part of it.

*Conversation with Vicki B. Escarra,
Team Manager, In-Flight Service,
Delta Air Lines*

How do Columbia's senior-level executive programs fit in with Delta's objectives?

Delta's objective is to become a world global airline. But we want to preserve our company culture as an airline that cares for its people and grows from within. In a time of unprecedented change, if you don't bring in many managers from outside, you need to bring in new ideas. The decision to invest in executive education followed. It became a vital part of our game plan.

How was the program useful to you personally?

I was at the point in my career when I needed an international perspective. I found myself studying alongside talented executives from all over the world. For four weeks, away from daily pressures, I could test new ideas, draw original conclusions. In a real case study, I could, without having to formulate strategies our company hadn't tried before. Several of those ideas are now being implemented by Delta.

What, specifically, did you take away from the program?

The section on Managing Innovation and Change was of tremendous value. The main lesson: when you have to manage change as large, for example, as Delta's acquisition of Pan Am assets, you have to go in quickly and act decisively. Get all the information you need. Simplify it. Chart a course in one clear direction. When you go global, you must manage with insight and vision. Managing global also means developing the ability to manage cultural diversity. That's what at Columbia, too.



The segment on leadership was very useful: when to make decisions as a group, when to make them on your own. How to get people to buy into a plan by listening to them and involving them in the plan's implementation.

You take away much more than you realize. On the job, ideas come back to you — a participant's comment, a professor's reply, a reading on finance or marketing — the ideas seem to surface just when they're needed. The benefits are immediate... and they're long term, too.

Q. Would you recommend the program?

A. I've talked with people who have attended other executive programs, and I'm convinced that when it comes to an overall executive program on general management, managing and effecting change and strategic planning, Columbia's program is the best.

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THE DEALS ARE GOOD, BUT THE DIAL TONE ISN'T

Rewiring Latin America's decrepit phones will be quite a job

Argentina's "Spidermen" dressed in black and prowled by night, like cat burglars. For a price, they would scale a wall, cut loose a phone line, and run it through alleys, up your wall, and into your phone. When the government put the phone company on the block in 1990, the "hombres de araña" were a force to be reckoned with. They offered overnight service in a country where people often waited five years for a phone. Of course, for each satisfied Spiderman client, there was a loser who picked up the phone the next day and heard dead air.

Sound like a congenial place to run a phone company? The Spanish, Italian, and French national telephone companies, along with Citicorp and J.P. Morgan & Co., think so. When Argentina split state-owned Entel into two companies, Telecom and Telefónica, those foreign investors created consortiums that bought majority control of the new entities for a combined \$650 million. What a bargain: The companies' combined value, based on prices for minority shares since sold by the government, has soared to more than \$9 billion.

Nearly overnight, Latin America has become a telephone-industry bonanza. These booming economies desperately need better phone service to accommodate growth. And governments, recognizing they can't do the job themselves, are selling their phone companies

on terms that allow buyers to earn healthy returns.

Last year—its first as a private company—Teléfonos de México (Telmex) racked up \$2.3 billion in profits on revenues of \$5.4 billion. "God doesn't allow such profits," marvels a U.S. consultant to the company. But governments, not the Almighty, are promoting such re-

turns by granting monopolies of 4 years to 10 years so the companies can set up their networks before they face competition. A \$10,000 investment in Teléfonos de México six years ago is now worth roughly \$300,000.

MUSEUM PIECES. Whether the next half-dozen years will be as profitable for investors is a matter of intense debate on Wall Street. Salomon Brothers Inc. analyst Stephanie Georges, pointing to continued growth and receding inflation in the region, says Latin American phone companies should blossom. "Telecom infrastructure, so it's the cleanest play on the local economy," she says. "Under favorable economic conditions, they won't keep phone-company shares at their upward climb. To do that, the owners of phone companies must face the real miracle: making Latin American phones work."

It's a long, costly job. In spite of careful selection, buyers have been taken aback by the decrepitude of the networks they inherited. In Mexico, many phone lines running underground are being gnawed bare by rats. The new owners in Argentina discovered switches that belonged to museums, one dating from 1913. "Entel hadn't invested a penny for the last 8 to 10 years. There were no diagrams of the network," says Telecom spokesman Giulio Segura. In Venezuela, fully 1 million lines are not even soldered properly into switches. The leads to eerie howls and deafening crashes at the line.

Even with monopolies, the phone companies can't simply raise rates to pay for new gear. Customers won't stand for it. Already Chile's phone company has been accused of profiteering by hiking rates. Telmex dialed howls when it raised rates 16% last December. National Consumer Council Director Alfredo Baranda, who left the old Telmex, says the new owners should

BUYING INTO LATIN AMERICA'S PHONE MARKET

Company/Year	Buyers	Price
COMPANIA DE TELEFONOS DE CHILE 1990	Spain's Telefónica bought controlling stake from group headed by Australian investor Alan Bond	\$388 million
ENTEL, ARGENTINA 1990	Groups headed by Spain's Telefónica and Italy's STET bought majority shares after split into two companies	\$650 million plus assumption of debt
TELEFONOS DE MEXICO 1990	Group including Mexican investor Carlos Slim, France Telecom, and Southwestern Bell bought controlling share	\$1.76 billion
CANTV, VENEZUELA 1991	Group led by GTE, Spain's Telefónica, and AT&T bought controlling share	\$1.9 billion

DATA: BW



TELECOM WORKERS INSTALL NEW PHONE LINES IN BUENOS AIRES

more of the consumer and less of
 Corp. finds itself in a particularly
 spot. Last February, two months
 GTE-led consortium completed the
 se of a controlling interest in Ven-
 s CANTV, the military attempted a
 Now, even though the phone com-
 eeds to raise rates to help pay for
 ization, it has delayed an Apr. 1
 e indefinitely, partly out of fear
 could spark more civil unrest.
 hwhile, the phone companies must
 o costly government timetables
 roving and expanding service. If
 all short, the governments can
 e doors to competition ahead of
 e. Telmex, for example, must in-
 .5 billion from 1991 through 1993
 ease the number of lines by 12%
 r and link up 8,000 rural commu-
 Last year, the company invested
 lion. It met expansion targets but
 in improving service. Mexican
 continue to be out for weeks at

EXPECTATIONS. Phone executives
 their progress to date. They have
 of obstacles, including strong la-
 ions and iffy mail systems for
 y bills. And they must do business
 e same miserable systems they're
 o fix. "It took a long time for the
 to get this bad," says John H.
 ary III, president of Southwest-
 ll's International Holdings Corp.,
 rity owner of Telmex.

but long-suffering customers
 en led to expect more. "They will
 ever, and it will get better," Fi-
 Under Secretary Jacques Rogo-
 redicted last August. Now Rogo-
 who presided over the Telmex
 ays the company has been hin-
 y difficulties such as heavy rains
 mmer and new antipollution rules
 ke it more difficult to dig up the
 to lay cable.

of those concerns is deterring
 rs looking for the next Telmex.
 atest favorite is Brazil's Telebras,
 rgest phone company in Latin
 a, which is likely to sell off a
 y stake in the next two years.
 y shares in the government-con-
 company have ballooned twelve-
 the past year. Yet Salomon
 s' Georges says Telebras is still
 at only one-sixth the price of Tel-
 ased on the market value per
 ine in service.

Brazil, no big phone companies
 left to sell off. Then investors
 ve to start scrutinizing the real
 and rewards of the campaign to
 latin America. This is one battle
 ly will be decided in the trenches.
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ri Smith in Rio de Janeiro, with
arters in Caracas

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STORE OWNER PIGNATELLI: AFTER TESTING OS/2 FOR IBM, HE WON'T SELL ANYTHING ELSE

IBM TAKES ANOTHER CRACK AT MICROSOFT'S WINDOWS

It's relying on friendly users to help it build a better OS/2

Tucked away in a cobblestone courtyard off the main street in Litchfield, Conn., sits the Corner Store, a decidedly upscale general store. Catering to the town's 8,000 residents and the well-heeled visitors who weekend in the region, it stocks everything from classical compact disks to personal computers and antique toy soldiers. And, oh yes, it's also a software testing lab for IBM.

Paul Pignatelli, the store's owner and a former researcher at AT&T Bell Laboratories, is one of about 200,000 IBM customers at 30,000 companies who are helping the computer giant shake the bugs out of a critical new release of a program called OS/2. It's the biggest customer test ever in PC software—and a remarkable change for Big Blue. While other software makers have routinely distributed "beta" or prerelease versions of products to outside testers, IBM usually relied on employees to find glitches. "We needed feedback and closer ties with our customers," says Tom Steele, director of the 400-programmer Boca Raton (Fla.) center responsible for the new OS/2 version 2.0.

This time, IBM needs to get it right. "IBM has one last chance to make OS/2 a success," says J. Paul Grayson, presi-

dent of Micrografx Inc., which is writing part of the program. IBM has spent five years and an estimated \$1 billion to develop OS/2 and sell it as the industrial-strength replacement for Microsoft Corp.'s MS-DOS program, the 11-year-old operating system—or basic control program—for IBM-compatible PCs. But only about 1 million copies have been sold. By contrast, since breaking off its partnership with IBM in 1990, Microsoft has gone on to sell 10 million copies of Windows, a graphics program that gives MS-DOS an easy-to-use "look and feel."

The new version of OS/2, scheduled for shipment on Mar. 31, should help overcome problems of earlier versions,

THE OS/2 LESSON

- ▶ Bugs are most effectively spotted by customers, not programmers
- ▶ Testers wanted a better "user interface"
- ▶ Computer programs are best developed in one location, not in several as IBM had done with earlier OS/2 versions
- ▶ Small teams of programmers are more productive than large groups

DATA IBM

including the inability to run MS-DOS programs easily. "We set out to build it in a way that was a lot different from the past," says Steele. Through thousands of phone calls and electronic-mail messages from participants in the six-month "Early Experience Program," IBM quickly learned of the bugs in its 2 million-line program. Participants had hundreds of PC brands running thousands of applications, so they found glitches IBM new would have.

KEY EXCHANGE. IBM marketers also paid close attention. After posting suggestions on a special IBM electronic bulletin board, Pignatelli got a call from an IBM marketing executive. "I was surprised to get approached by one of the honchos at IBM," Pignatelli says. Eventually, an IBM representative visited his store.

Customer feedback persuaded IBM to make a key change: replacing the old Windows-like graphics with new "user interface" that permits people to "drag and drop" graphical icons—like on the Macintosh. The decision was made after IBM designers watched computer users at work in IBM's Usability Laboratory in Boca Raton. As a result, the improved interface is "based on direct user feedback and suggestions," says John O. Dunkle, a consultant at OS/2 product tester with WorkGroup Technologies Inc. in Hampton, N. H. Another OS/2 tester, Jim Gilliland, manager of tax systems at BP America Inc., says the new interface persuaded him to outfit everyone on his 150-computer network with OS/2 by 1993. "I find it quite pleasing," he says.

Even with a new, user-friendly face, OS/2's fate is uncertain. Analysts estimate that IBM will sell from 2 million to 4 million copies this year. That's great compared with older versions of OS/2, but pales in comparison with Windows, which is selling at a rate of 1 million copies a month. OS/2 remains a complex program that requires about six megabytes of computer memory—compared with just two megabytes for Windows. So it's unlikely to find a mass market. Still, IBM hopes the program will catch on in its key market: big corporations that want the most sophisticated software for PCs and networks.

There's another place where OS/2 might nudge Windows aside. At the Corner Store, Litchfield's sole computer shop, the only operating system sold is OS/2. Like his other wares, says Pignatelli, it's the best. Thanks to his efforts—including giving copies to his daughter's school—"here in Litchfield everybody knows about OS/2," he says. Today Litchfield, tomorrow the world.

By Evan I. Schwartz, with Paul M. E. in New York

PC BOOM JAPAN'S CLASSROOMS

of computer illiteracy has sparked a buying spree

a technologically advanced country, Japan is remarkably backward when it comes to computers. Even personal computers remain a rarity to many Japanese managers. In Japan's classrooms, there are only 1,000 computers for 20 million pupils—that's one computer for every 80 students, compared with one for every 20 in the U.S., according to market research firm Quality Education Data Inc.

But that computer phobia will be overcome by competitive liability, Japan is going for a school-computer buying spree. A five-year program begun in 1990 by the Education Ministry is spending more than \$1 billion to help local school districts install PCs in rural and urban schools. Local governments will cough up the rest of that sum, and cities such as Tokyo and Osaka have their own ambitious plans. The push for computers and software could top \$1 billion, estimates NEC. "This will be good for Japan," declares Hirokazu Iwagawa, chief curriculum supervisor for the Tokyo Metropolitan Board of Education. "We're already advanced in science and computers will make it."

COMPETITORS. While Americans have made a big splash in the Japanese PC market—both Apple Inc. and IBM have a 7% market share—the school market is shaping up as a contest for Japanese suppliers. The front-runner is NEC, which had Japan's PC market last year, according to Dataquest Inc. To keep a competitive edge in education, NEC has opened a school for teachers and offers weekly software seminars.

The sole serious challenger so far is Fujitsu Ltd. It has only 6% of the PC market but is spending heavily to build a reputation for FM TOWNS, a PC that uses optical disks to present a lively mix of data, text, sound, and images. CD-

ROM-based electronic encyclopedias of ornithology, botany, and astronomy, which list for \$60 to \$227, helped Fujitsu sell 20,000 FM TOWNS machines to schools last year. That, and 7,000 conventional PCs, gave Fujitsu 42% of the school market, says Fujitsu educational sales manager Yukitada Usuku. The plan is a direct copy of Apple's strategy for Apple II in the U.S. "If you can get PCs into the schools," says Usuku, "you can get them into the homes."

American PC makers say they would like a piece of the action, too, but seem unlikely to get much. The U.S. suppliers

ager. Goto is trying to persuade Apple headquarters to take extraordinary measures, including donating computers, to get a foot in the door.

Long term, the big hurdle for the Americans may be their anemic distribution. Apple has only 48 dealers in Japan, plus 1,700 resellers, compared with 9,000 NEC outlets—including 300 stores that sell only computers. Fujitsu has 92 branch offices with education specialists.

GET 'EM EARLY. IBM's tack has been to use software as an entrée to schools. Last December, it released low-priced math and data-base packages for secondary schools that run on either IBM PCs or the incompatible NEC hardware. It was the first time IBM tailored PC software to a rival's system. Since 1990, IBM has also donated dozens of PCs to test programs in schools.

For all the suppliers, Japan's education market has less to do with fattening today's bottom line than with creating future customers. Consider the scene at Tokyo's Nishi Rokugo public elementary school, near Kawasaki. With 20 Fujitsu



DESKTOP ABCs: JAPAN HAS ONE COMPUTER FOR EVERY 80 STUDENTS, VS. ONE FOR EVERY 20 IN THE U.S.

say the government guidelines treat non-Japanese suppliers fairly. But conservative teachers and school boards instinctively go with the market leaders, who happen to be Japanese.

So far, the biggest hang-up for Americans has been price. The Japanese are willing to cut prices—even more drastically than the Americans have at home—to win deals. For a recent bid in Osaka, the winner lopped 74% off the retail price. Apple wouldn't go that low. "There are limits," says Tatsuo Goto, Apple Japan's education marketing man-

FM TOWNS lined up in front of him, 38-year-old Kenkichi Mochizuki teaches his third-grade class to write and edit simple compositions and illustrate them with an electronic painting program. "These children feel tremendous satisfaction," he says. "They approach the whole thing as a game. If they can keep that spirit, they won't ever grow to dislike the technology." And, Fujitsu is betting, if they keep that spirit, they'll get their parents—and one day their bosses—to buy Fujitsu computers.

By Neil Gross in Tokyo

SOFTWARE THAT CAN DETHRONE 'COMPUTER TYRANNY'

U.S. companies are trying to catch up to Japan's ability to get machines working more like people

For a time, it looked as if fuzzy logic would pass America by—to the detriment of U.S. competitiveness. The Japanese have spent five years cranking out innovative “smart” products, from subway trains to camcorders, that rely on this arcane branch of mathematics. With new “fuzzy” automatic transmissions, Japanese cars shift with unrivaled smoothness. Fuzzy elevators in Tokyo whisk people up and down more quickly. Japanese brokers even use fuzzy logic in stock-trading programs that, according to Wall Street rumors, have outperformed American software. Most U.S. companies, meanwhile, have scoffed at this technique, known formally as fuzzy-set theory.

No more. Now, fuzzy logic is about to appear in scores of American-made products. Some, such as an elevator-dispatch system coming this fall from Otis Elevator Co., are a response to stiff Japanese competition. Others, such as Allen-Bradley Co.'s new controllers for shop-floor manufacturing, stem from the discovery that fuzzy logic can sometimes produce better accuracy and reproducibility—and therefore quality—than traditional techniques. “We may be five years behind,” says Piero P. Bonissone, a computer scientist at General Electric Co.'s research-and-development center, “but at least we've gotten started.”

'FREWARE.' To spur the trend, chipmaker Motorola Inc. has just begun selling a software-development system, created by Aptrox Inc. (box), to help engineers design fuzzy-logic products. In June, Motorola will roll out a computer-based education program to teach customers to write fuzzy-logic software. And it is working on special microchips that have fuzzy logic embedded in the circuitry,

similar to the pioneering chips introduced three years ago by Togai Infra-Logic Inc., an Irvine (Calif.) startup with many Japanese customers.

Motorola's passion for fuzziness also takes a cue from Japan: The company discovered that Sony Corp. and Canon Inc. were using its standard chips, plus

call. The fuzzy one quickly became Motorola's most popular “freeware” ever.

Steven C. Marsh, director of strategy operations at Motorola's microcontrol division in Austin, Tex., interprets this as proof that U.S. engineers are feeling the heat of Japan's innovations. “Sometimes you have to hit Americans on the

head to get their attention,” says. “But now, it's clear to me that by 1995 half of everything we ship worldwide will use fuzzy logic.”

EASY OVERLAP. Despite the name, fuzzy logic uses crisp mathematical methods to deal with approximations—such as most, many, few, and slightly—by assigning specific numbers to clusters of overlapping gradations, or sets. It was the 1965 brainchild of Russian-born Lotfi A. Zadeh, who retired last year as a professor of computer science at the University of California at Berkeley. “Classical logic represents an attempt to formalize human reasoning and make it more precise,” Zadeh says. “Fuzzy logic accepts the fact that 99.9% of human reasoning is not precise, and tries to conform to it.” Fuzzy logic thus promises to end “computer tyranny.” Rather than forcing people to adapt the way computers work, it imbues products with what Zadeh terms “machine IQ” so they can better accommodate human foibles.

For the Japanese, this has proved invaluable for getting products out faster. Software typically the main bottleneck on any new-product project, no longer requires programming

to foresee all eventualities in exercising detail and encode the proper responses in a maze of equations. Instead, problems can be solved with a few rules written in everyday terms.

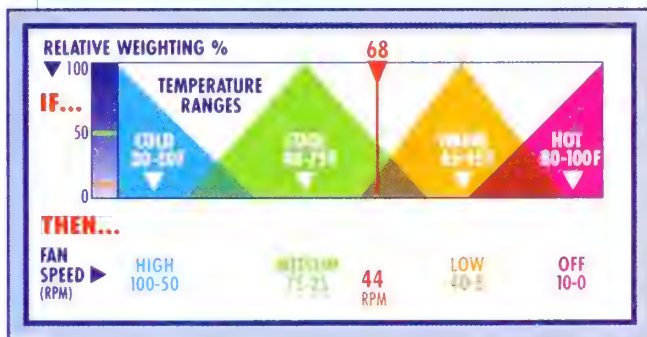
Example: Who is tall? To answer this with the yes/no, or binary, logic of digital computers, each height must be

FUZZY LOGIC: HOW IT WORKS

Fuzzy logic is a form of math that lets computers deal with shades of gray. Here's a simplified example of a thermostat controlling a heater fan. A conventional thermostat acts as an on-off switch. Set it at 68. When the temperature falls below 66, the heater fan kicks on. At 70, it shuts off. So the room is alternately too warm or too cool.



A FUZZY-LOGIC THERMOSTAT does a more complex calculation. Software written into its microchip looks at temperature as a series of overlapping ranges. The controller is also programmed with if-then rules that tell the continuously variable-speed fan how fast to run. If the temperature range is low, the speed is high (below).



At 68, the thermostat would see the temperature as 50% cool and 15% warm. By applying this relative weighting, it would calculate a fan setting of 50% medium and 15% low—a speed of 44 rpm. If the temperature changes, the fan would adjust instantly to keep the room at a constant temperature.

DATA BW

fuzzy logic, to add superior auto-focus features to camcorders. So Motorola decided to test the waters in the U.S. It wrote a simple fuzzy-logic program and, last November, listed it on the company's electronic bulletin board, which contains dozens of programs that customers can download for the price of a phone

or not. If you decide that tall at 72 inches, you exclude 71.9. But in real life, tallness is relative among basketball players, 72 inch-ort. With fuzzy logic, the set of le can overlap the not-tall. Thus, s can be tall in one situation but another. Binary logic can cope h anomalies, too—but not easily. U.S. companies are seeing the of this approach. Ford Motor instance, challenged an engi-team to apply fuzzy logic to con-at keep a car's engine idling v under changing conditions, when the air-conditioning kicks toplight. A month later, the pro-as ready. With binary logic, an-am took three months.

Last year, Southwestern Bell ent many months trying to im-n information-retrieval system arches for keywords in data he programming problem was to ling up unwanted citations. "We at marine biologists were get-of articles about the Miami Dol-notes Jackson Tung, Southwes-irector of information-services gy. Finally, Tung hired a fuzzy who modified the software so it onsider not just keywords but r context.

Technologies Corp.'s Otis Ele-it had a more urgent problem. It

needed to match Hitachi, Mitsubishi, and Toshiba, which already have elevators that reduce waiting time. They use fuzzy-logic controls that respond on the fly to changing demands. "Our motivation was primarily competitive," says Siddiq A. Sattar, senior vice-president. "But once we looked at it, we concluded that, for dealing with uncertainties, fuzzy logic offers significant benefits."

MARKETING EXECUTIVES WORRY THAT CONSUMERS WILL CONFUSE FUZZY LOGIC WITH FUZZY THINKING

GE is pushing to use fuzzy logic to regulate jet-aircraft engines, save water in home appliances, and drive 200-ton rollers in steel mills. Appliance controls will be first, says GE's Bonissone, because "it takes a shorter time to implement them, and there's a faster payoff."

DISCOURAGING WORD. U.S. converts probably won't brag about their fuzzy features. "In Japan, 'fuzzy' has achieved a fad status that helps sales," says Gerald A. Eisenbrandt, a staff engineer at Whirlpool Corp., which uses fuzzy logic to regulate defrost cycles in its latest

refrigerator. That's partly because in Japanese the word "fuzzy" doesn't carry a disparaging connotation. There's no contradiction in fuzzy lenses that improve the focus of camcorders.

In the U.S., however, marketing executives worry that fuzzy logic might be confused with fuzzy thinking—especially since some computer scientists insist that the two are synonymous. Ford is therefore reluctant to jeopardize the image of a new cruise control that the company hopes will use fuzzy logic not only to maintain a car's speed more accurately but also to brake automatically should the car get too close to another.

Despite the remaining pockets of skepticism, fuzzy logic's newfound popularity is a sweet victory for Zadeh. Like other leading American thinkers, notably quality gurus W. Edwards Deming and J. M. Juran, Zadeh is accustomed to being revered in Japan but ignored at home. That began to change in mid-March, when San Diego hosted the first fuzzy-logic conference organized by the prestigious Institute of Electrical & Electronics Engineers. Zadeh was the keynote speaker and found himself besieged by TV reporters as well as by engineers and other representatives of Corporate America. Even engineers, it seems, are sufficiently tired of computer tyranny to snuggle up with a new idea.

By Larry Armstrong in San Diego

A BEIJING WHIZ WHO FOUND THE WAY TO SAN JOSE

Wei Xu was a student at Beijing Normal University in the early 1980s when he began studying fuzzy logic. It was a natural move for a student in a country where more than a dozen institutes and researchers were working on fuzzy technology. But what came out of the research was not only described as extraordinary: By a set of curious circumstances, Wei Xu (pronounced "wee" or "hoo") has become a Silicon Valley entrepreneur, complete with a \$4 million company called Aptronix Inc. and a couple of sports cars in his garage.

After graduating from Beijing Normal University in 1984, Xu designed fuzzy-logic controllers for oil rigs and a plastic-film extruder, plus an aircraft-engine control system for the Chinese air force, he says, however, that "it's hard to start a private company in China, there's no competitive pressure in a communist country to get products to market faster." So he went to Toronto, started a business, and sold fuzzy-logic designs to the likes of Sony Corp.



APTRONIX' XU: READY FOR A FUZZY BOOM IN THE U.S.

and Omron Tateisi Electronics Co.

He might be there still if it weren't for the 1989 crackdown in Beijing's Tiananmen Square. Several of Xu's Chinese engineers rushed to renew their visas to stay in Japan. The Japanese refused. So Xu moved his company to San Jose, Calif.

He has kept most of his Japanese customers. But Xu, now 30, sees more opportunity in the U.S. In Japan, he says, fuzzy's biggest market is for consumer products, where the need to add features will be quickly exhausted. In

America, "as the computer industry becomes more graphics-intensive—with multimedia, data compression, and real-time animation—fuzzy logic will become a huge industry," says Xu. That's because fuzzy can greatly simplify the complex computations needed for graphics.

SHY PEOPLE. In the meantime, Aptronix has teamed up with Motorola Inc. Xu's company will supply software tools that Motorola customers can use to program the chipmaker's microcontrollers.

These chips now help run everything from coffee makers to car engines.

Xu has two U.S. competitors: Togai InfraLogic Inc. in Irvine, Calif., which makes fuzzy chips and software, and Allen-Bradley Co., which sells a fuzzy software-development package created by its parent, Rockwell International Corp. But the big challenge, he says, is getting U.S. engineers to lose their shyness of fuzzy logic: "The name confuses people," he adds. "I would have called it 'continuous logic.'"

By Larry Armstrong in Los Angeles

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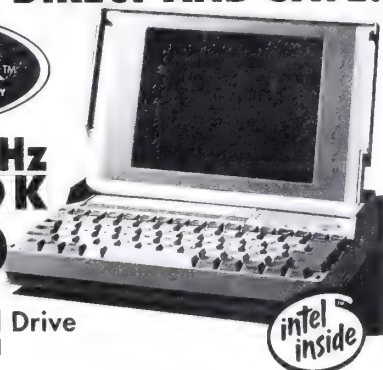
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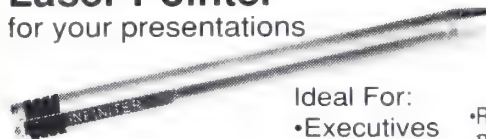
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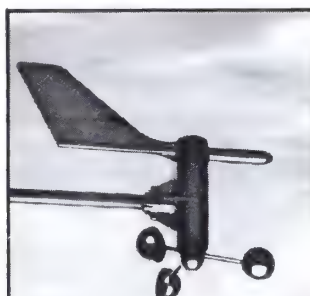
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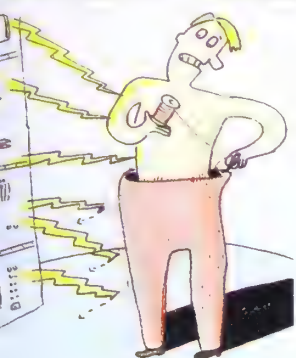


Nature appears Sundays
on PBS

Developments to Watch

BY FLEUR TEMPLETON

PERFECT THING TO WEAR A TWO-HOUR TV MOVIE



Recent studies suggest possible health risks associated with exposure to electromagnetic fields. Now, an Italian textile maker, Florence-based Lineapiù, has developed a rayon and carbon-fiber yarn called Relax that shields the body from EMFs.

Carbon fiber is used in space suits and industrial protective clothing, but this is its first use in

on product. Santi Tofani, a physicist specializing in EMF at Piedmont Region's Public Health Laboratory near says the carbon partly reflects EMFs and partly absorbs. His tests show that Relax reduces exposure to EMFs in ge emitted by TVs and other appliances: 0.1 megahertz Mhz. Relax isn't effective, however, for higher frequen- m microwave ovens or for lower ones from power lines. d 25% to 30% higher than ordinary rayon thread, Relax s a 6% blend of the expensive carbon fiber. French er Azzedine Alaia is using Relax in his spring collection, her designers expected to follow suit in 1993.

SURGICAL PAINKILLERS T SLIP ON YOUR WRIST

ents recovering from surgery often complain that pain- lers aren't working. That's because it's hard to adminis- h drugs precisely when they're needed. To manage pain effectively, Elan Corp., based in Gainesville, Ga., has ed a wristwatch-style intravenous pump system that s a uniform dosage. And it's more portable than exist- venous systems.

Panoject system has a disposable cartridge that fits into h-like control unit. The controller reads the prescribed encoded on the drug cartridge. Then, drugs are d from the cartridge into a catheter in the patient's arm. ent can get extra medication by pushing an override though there are limits that prevent an overdose.

lly, Panoject will deliver morphine and other potent ics, says Elan Chief Executive Donald E. Panoz. Later, be used for insulin and chemotherapy agents. Panoz he device is currently in clinical trials and that the ay plans to file for Food & Drug Administration approv- he end of 1992.

M LOG TO LINGERIE FEW EASY STEPS

ct time you shop for lingerie, take a closer look. That ghtgown might once have been a telephone pole. Micro- nc., in Boca Raton, Fla., is recycling old utility poles and d ties into chemical-free wood chips to sell to producers n and other materials.

wood is shredded, then inoculated with lab-grown mi- In a process known as bioremediation, the bugs eat

hazardous wood preservatives such as creosote. Once the contaminants have been devoured, the wood can be reprocessed into cellulose-based products, such as rayon or cardboard. Microterra, which licensed its process from Louisiana State University, is building a plant at Tallulah, La., designed to recycle up to 50,000 poles or 300,000 ties per month.

Microterra plans to charge \$80 per pole and \$10 per railroad tie, compared with the average \$1 it costs to bury each of these in landfills. Despite the high premium, Microterra President Richard C. Fox expects sufficient supplies. Burning the chemically soaked poles and ties is now illegal in some states. And under Environmental Protection Agency regulations, companies can be held liable if contaminants leak into the soil.

GIVE ME TWO HARD DRIVES TO GO

Portable computers often have a drawback: The machines can be rapidly overloaded by complex software and large data files. So SyDOS, based in Boca Raton, Fla., has come up with a system that will give portable computers boundless amounts of storage. The company's new SQ2542A hard drive is no larger than a pack of cigarettes. Like standard drives, it writes and reads information on a hard platter coated with magnetic material. But the platters—which hold over 40 million characters of information—can be removed, just like floppy disks. SyDOS President Timothy E. Mahoney says the system will give portable computers the storage of a regular hard drive with the convenience of a floppy-disk drive.

The first computer maker to use these removable 40 megabyte hard disks, Bondwell Industries Co. in Fremont, Calif., plans to release a \$3,700 machine equipped with the drive by June. SyDOS says a \$900 external version will be available for older portables by August, and its parent company, SyQuest Technology in Fremont, may sell a similar drive for the Macintosh crowd.

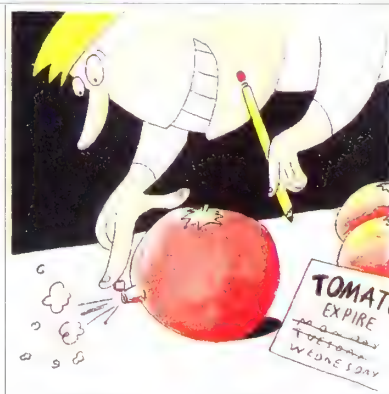
A FOUNTAIN OF YOUTH FOR RAPIDLY RIPENING TOMATOES

Getting produce to market before it spoils is a constant battle with Mother Nature. One way to ensure ripe tomatoes is to pick them green and induce ripening with ethylene gas. But too much gas can cause overripening—which results in an annual loss of tomatoes worth \$30 million.

Ethylene is a natural hormone produced by an

enzymatic reaction in tomato plants. Robert A. Saftner, plant physiologist at the Agriculture Dept.'s Horticulture Crops Quality Laboratory in Beltsville, Md., has found a way to alter the plant's own ethylene production—and thus better control its ripening. The key is to vary cell pressures in the plant tissues by adjusting factors such as temperature and sugar concentrations.

Saftner says cell pressure also may influence ethylene production in other produce. Further application of his research, he says, could someday help double the shelf life of tomatoes, and other fruits and vegetables, too.



EDITED BY AMY DUNKIN

IT'S TAX TIME. BUT THERE'S STILL SOME SHELTER LEFT

Will I ever see the day my tax rate will be lower than it is now?" That's what many taxpayers are wondering as they finish their 1040 forms. With Congress focusing on ways to raise revenue from upscale taxpayers, tax pros are steering clients toward some type of shelter.

That doesn't mean the limited partnerships of yesteryear, with the red-hot write-offs that the 1986 Tax Reform Act pretty well extinguished in its attack on "passive losses." Instead, the emphasis now is on more prosaic—and often neglected—ways to shelter income legally.

The stars these days are "retirement plans that allow tax-deductible contributions," says John Erb, a principal of De Teffé Capital Management in Alexandria, Va. "There's not a lot else left." They will be even more important on the grounds that Congress is likely to hit higher-income taxpayers harder once this election year is history.

CLEAR INCENTIVES. Even if tax rates are steeper when people withdraw funds from retirement plans, the tax-free compounding of interest over the years may be "powerful enough to make the plans worthwhile," says Donald Levy, senior consultant for the Research Institute of America in Englewood Cliffs, N.J.

At a big company, the savings vehicle of choice is apt to be a 401(k) "salary reduction" plan. A slice of your salary stays out of your paycheck and out of your taxable income. Your take-home pay doesn't drop by the full amount, however, because your income tax withholding goes down accordingly.

When your employer



part of your contribution to a 401(k) is an excellent way to save on current taxes. Says Gary Claus, partner in Price Waterhouse's New York office. An employer's contribution up to \$8,728 for an employee in 1991. When the employer contributes too, the overall ceiling is \$10,000 a year.

Small-business owners and employees, the Simplified Employee Pension deserves more attention than it usually gets. Although the money goes into an ordinary IRA, the contribution limit is 15 times the employee's salary—up to \$10,000 a year, or 15% of earnings, whichever is less. The plan matches that of the Keogh plans for self-employed, but SEPs involve less paperwork.

Arrangement with your employer to defer some compensation until a future year is a possibility for top executives. But, Research International of America's Levy cautions, "Deferred compensation more questions than it answers. Corporate executives and shareholders have been collecting compensation, and tax

could be considerably reduced by the time you collect. Advice about sinking all compensation into tax-deferred retirement plans should be tempered in harder times. If you quit at your job—if not your company—is in danger of blowing the tubes, just put your income outside of your retirement plan, Deane Erb advises. Otherwise you could find that you're not at your nest egg in an emergency without paying the tax plus a 10% penalty on withdrawing funds before age 59½.

TAXES. There are still old-fashioned tax shelters, although planners caution before taking advantage. "Working interest in oil and gas partnerships still enjoy some tax shelter. The crackdown on limited partnerships compares many active investors and those who in low-income housing,

notes Lee O'Connor of Grant Thornton. And some financial advisers recommend buying a deferred annuity from an insurance company. Earnings pile up tax-deferred until you start getting a regular payout. But make sure the deal equals other savings choices.

For some families, Price Waterhouse's Claus suggests "simple gift-giving to a kid." A person can give \$10,000 annually to a child (or anyone else) without any gift or estate tax impact. Put in a savings account at current low interest rates, that sum would earn the child around \$400 in a year, tax-free. "As long as you keep the kid's taxable income under the \$600 threshold, there's no return to file," Claus says.

The next \$600 of investment or "unearned" income during 1992 would be taxed at the child's 15% rate—still a bargain for parents in the 28% or 31% brackets. Under the dreaded "kiddie tax" rule applying to a child under 14, investment income of more than \$1,200 this year will get

taxed at the parents' top rate. However, "there's a way to deal with that," points out Alan Klein, an Arthur Andersen tax partner in Dallas. Instead of banking the gift, he suggests putting it into municipal bonds that pay tax-exempt interest. Then, "by no means does the kiddie tax have a chilling effect on giving." Switching some of your own portfolio into munis often makes sense, too: in the 31% bracket, 6.5% on a muni is equal to 9.42% in taxable interest on Treasuries or corporate bonds.

But when your gifts are for tuition 15 years or so down the road, "don't worry about munis—put the money into growth stocks," suggests Klein. They pay small dividends, if any, that get taxed along the way, and history indicates that "there's probably no better investment on a long-term basis in this country than the stock market."

A CHECKLIST FOR TAX SAVINGS

No one wants to pay more tax than the law requires. But many people do. One reason is they haven't kept records that would allow them to claim various tax breaks (page 98). And many people haven't explored legitimate ways to shelter income. By asking yourself the following questions, you just might turn up an opportunity you've been overlooking:

- ☒ Am I feeding my corporate rate 401(k) plan to the max?
- ☒ Do I have self-employment income that I could put into a Keogh plan or a Simplified Employee Pension?
- ☒ Would my company set up a deferred compensation plan for me?
- ☒ In my tax bracket, would I gain from having more tax-exempt municipal bond interest?
- ☒ Am I managing my investment income in a way that lets me deduct all the interest I pay on my margin account?
- ☒ Does anyone in the family qualify for a tax-deductible IRA contribution?
- ☒ Should I shift some investment income to a child who's in a lower tax bracket?
- ☒ Do I have appreciated stocks, art, or other assets to donate to charity (to get a deduction and avoid capital-gains tax)?
- ☒ Have I looked into how trusts could help save on estate tax and maybe even on income tax?
- ☒ Would it help to have a home-equity loan instead of paying nondeductible interest on car loans and credit cards?

DATA: MERRILL LYNCH & CO., INTERNAL REVENUE SERVICE, BW

Major gifts to charities are part of many an upper-income taxpayer's strategy. But they can be complex, and an early start helps. For instance, if you have a much-appreciated painting that you'd like to see in a museum, Congress has extended the "one-year window" of relief from the Alternative Minimum Tax—but only to June 30. The AMT works by adding back certain deductions from regular tax. So after June 30, you could be hit with the 24% AMT rate on the difference between the price you paid and the current value of the donation.

SPECIAL TRUSTS. When you consider a major gift to a charity, allow ample time to get professional advice and explore all the deals. Instead of giving cash or securities outright, you can place them in a special trust (typically \$50,000 and up). You get lifetime income plus an up-front deduction for part of the value, and the college, environmental group, or other non-profit organization gets the money when you die.

If borrowing is more your thing at the moment, advisers stress that interest on home-equity loans is still deductible, while credit-card and other personal interest isn't. And a margin loan from your broker is "probably the most inexpensive way to borrow," suggests John Steffens, executive vice-president of Merrill Lynch's private client group. The annual interest on a loan to buy securities costs around 7% or 8% now, and it's deductible to the extent of investment income.

A money-waster that's all too common is paying too much tax too soon. If you're due for a big refund on 1991 taxes, chances are you've been withholding too much or have set your estimated quarterly payments for 1992 too high. "The idea is to come as close to zero as possible" when you file your return, says Jim Velten of Coopers & Lybrand in New York. That way, it isn't the government that's "gotten the use of your money" in the meantime—it's you.

Dick Janssen

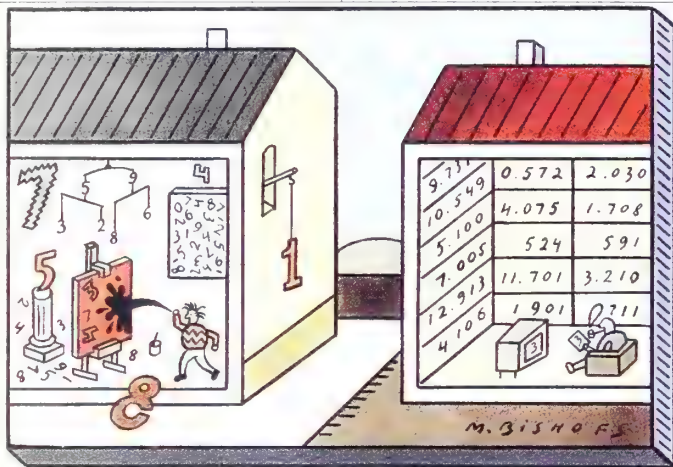


THE PAPER TRAIL THAT LEADS TO BIGGER DEDUCTIONS

Tedious as it may be, documenting every conceivable deduction is the key to any tax-saving strategy. Dollars you reinvested in mutual funds, hours you spent in your home office, miles you drove as a volunteer or on business, points you paid on a mortgage, days you rented out your vacation

home—these things and more may qualify for write-offs if you can back them up.

A major reason for overpaying taxes, accountants say, is failing to keep track of dividends and capital gains that automatically get reinvested in mutual funds. "It's one way you can really do yourself a disservice," says



HOME, SWEET DEDUCTION

The giddy price appreciation that your house enjoyed in the 1980s is no more. But real estate retains one timeless virtue: It's still the repository of sweet tax breaks. The obvious ones are deductions on federal returns for mortgage interest and property taxes. There are a bunch of other real estate maneuvers to reduce the Internal Revenue Service's take.

The most important one is figuring out the taxable profit from selling your house. Selling fees and home improvements can shrink the amount of profit you must report (chart). Sorry, normal repairs, such as replacing a broken windowpane, don't count as improvements, which must boost the house's value (an

extra room) or prolong its useful life (a new roof).

Beyond that, most people sidestep taxes altogether by rolling over the sales proceeds into buying the next home within two years. Trouble is, if after several houses you decide to become a renter, the accumulated profits from the previous homes are subject to taxes. "That's why you should hold down the reportable profit, even if you roll over each time," says tax attorney Julian Block, author of *The Homeowner's Tax Guide*. The tax code does provide a bonus for sellers 55 and over: They can shield up to \$125,000 in profits.

Did you lose money selling property? Tough luck. That's not deductible. One hope: Con-

Michael Kennedy of Coopers & Lybrand in Philadelphia. People tend to remember only the price they paid originally, he says, and use that as their cost basis when they sell.

But if they acquired other shares later at higher prices, they could reduce their taxable gain or write off a larger loss—if they have the numbers at hand. The mutual-fund company might give or sell you an account history. But by having a complete list before you sell, you can designate the shares that will let you come out best on taxes. Kennedy recommends updating your list when each statement arrives. “That’s what I do,” he says. “But that’s because I’m an accountant.”

MILEAGE AUDITS. You almost have to be an accountant now if you want to take a home-office deduction. On its new Form 8829, the IRS requires 42 lines of justification, ranging from size of the space and hours you use it to such gems as “carryover of excess casualty losses and depreciation.”

gress is mulling a deduction for home-sale losses that exceed 10% of income.

People who lose money on a sale of residential property converted to a rental are in better shape. They often can deduct some of that. They also get a break if they hang on to it and lose money because rent falls short of mortgage and operating expenses. The maximum deduction is \$25,000 for taxpayers with yearly adjusted gross income below \$100,000. This phases out for income between \$100,000 and \$125,000.

NEW RULES? While Congress may restore passive-loss breaks—where losses in property-investment partnerships offset other gains elsewhere—the rules are likely to exclude individuals in favor of big developers.

The tax code has been tightened for second homes, but mortgage interest and property levies remain deductible. However, the combined

Being a bookkeeper can be critical to nailing down deductions for using your car for business or as a volunteer for a charity. "Keep a daily log," advises Jim Velten of Coop & Lybrand. "They like to see the use of cars."

UR
KES

Then, the IRS is apt to wade through evidence of past purchase prices and outlays that add to the cost basis. Without records, the IRS could extract more tax on the final gain. The improvements don't have to be to the house itself, Brennan adds. Major landscaping or a swimming pool adds to your basis, too—and if the receipts are lost, he adds, "it's a photo" of the improvements to show the IRS.

mortgages from two hours. The loans can't exceed \$1 million.

Tax breaks for home offices have been circumscribed but they're not gone. You can take off a portion of household expenses even if you have a job and use one room of your home to moonlight as a consultant. And if you fill out your tax forms in it, there's no penalty. *Larry L.*

HOW TO SAVE ON TAXES FROM A HOME

Buying a home for \$100,000 in 1976 and selling it for \$335,000 now doesn't have to mean a \$235,000 taxable gain. Here's how:

\$335,000 Selling price
-20,000 Selling expenses
-170,000 Adjusted cost base

\$145,000 Taxable profit

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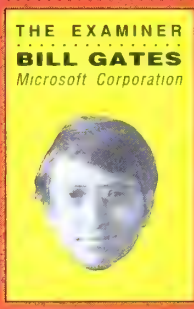

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DON'T GET TRIPPED UP BY LAST-MINUTE TRAPS

Whenever you make a mad dash to beat the Apr. 15 tax deadline, you're apt to make mistakes. But now, there's a greater risk of last-minute missteps catching an eye at the Internal Revenue Service.

The reason is a spate of tax-law changes that make preparing returns for 1991 "more complicated," says Bonnie Grisz, senior manager in the Dallas office of accountants Arthur Andersen. Now, the taxpayer must perform extra calculations on new worksheets buried in the Form 1040 instructions. Peo-

ple are the first on which you can't actually deduct all the itemized deductions you list on Schedule A. Not, that is, if your adjusted gross income (AGI) is over \$100,000. Such taxpayers have to find a 10-step worksheet on page 42 of the long-form instructions. You use it to reduce deductions by 3% of the amount of AGI over that ceiling. But some deductions are spared, and you can still keep 20% of the amount of those affected.

Even exemptions are no longer simple enough to be worked out on Form 1040 alone. If your AGI for 1991 is

each \$2,500 step over your threshold.

Tax procrastinators who also happen to be new parents face another hurdle. To justify a \$2,150 dependent exemption, Congress has decreed that even a one-year-old must have a Social Security number. There's a \$50 fine for omitting it, although the IRS suggests that you might be spared by noting you've applied for a number.

OLD SCORES. People who think about taxes only once a year might unwittingly take some deductions that died with the 1990 tax year. If these slip past a preparer and if the IRS takes a few years to catch up with them in an audit, the interest and penalties could prove costly.

On returns for 1991, there's not even a partial deduction anymore for "personal interest," such as on credit-card balances or car loans. And the deduction for investment-interest expense—the kind you pay to a brokerage house when you buy stocks on margin—is limited to the taxpayer's net investment income," notes the 1992 *U.S. Master Tax Guide* from Commerce Clearing House.

Some taxpayers may be disappointed, too, to learn that hair transplants, face-lifts, and other "unnecessary" cosmetic surgery no longer count as medical deductions. But surgery needed to correct a disfiguring accident still qualifies, says Martin Shenkman, a Teaneck (N.J.) tax lawyer

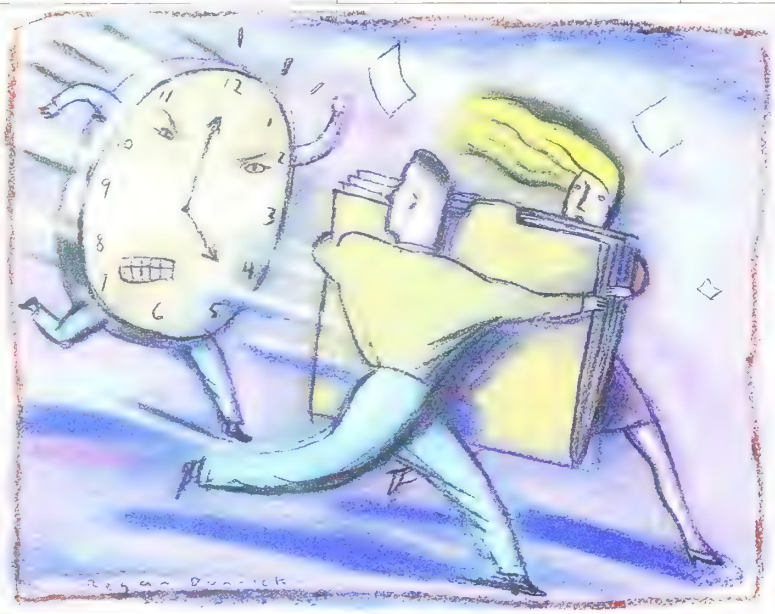
who writes for Bender's Federal Tax Service.

If the alternative-minimum tax hasn't been part of your life before, you might not know if it is now. The AMT makes you add back deductions and tax-exempt income, such as that from exercising incentive stock options. You have to pay the AMT if it comes out more than your regular tax. So because Congress raised the AMT for 1991 from 21% to 24%, it's apt to snare people who have planned ahead to avoid it.

STOP THE CLOCK. It does take anything new or out of the ordinary to trip up many otherwise-savvy taxpayers every year, says Coopers' Kennedy: That's because "a lot of people don't pay attention to the geography of the return. Often, when they report the income from a money-market fund, they enter it in the place of the return that is meant for interest."

They probably got that idea from the fund's ads. Even while money-market funds invest in Treasury bills and other instruments that pay interest, the IRS classes what the funds pay out to you as dividends—and dividends go on a different line.

If such complexities leave you feeling less than ready for Apr. 15, you can send a check for what you estimate you owe and ask for an automatic four-month filing extension on Form 4868. One advantage is that, adds Andersen's Grisz, is that you gain extra time to "establish a Simplified Employee Pension (SEP) plan if you're self-employed" or for a Keogh retirement plan that you opened before the end of 1991. Either way, it could mean a 1991 deduction of up to \$30,000.



ple who do their returns manually "are used to focusing on what's on the return itself," says Michael Kennedy, tax partner in charge of the Philadelphia office of Coopers & Lybrand. "Going off of the return can be tricky."

For instance, 1991 returns

more than \$75,000, you have to use a worksheet on page 24. It lists different cutoffs for each filing status (such as married filing jointly—\$150,000) and takes you on an eight-step trek toward reducing each exemption's value; the amount of the cut is 2% of

stubs, suggests the American Institute of Certified Public Accountants. The stubs may remind you of automatic payroll deductions for dental or medical insurance or donations to United Way or other charities.

■ UNSAFE HARBOR. Estimating tax takes more care. If your income is growing, talk to a tax pro. The "safe harbor" rule—no underpayment penalties if 1992 quarterly payments equal 100% of 1991 tax—may not work for you

Worth Noting

■ POSTAL PROOF. Using registered or certified U.S. mail is "the only way to obtain absolute proof" of filing your tax return on time (or at all), says

Ernst & Young's *Financial Planning Reporter*. Receipts from commercial carriers aren't treated as "prima facie evidence."

■ STUB CHECK. Before signing off on the itemized deductions, examine your paycheck

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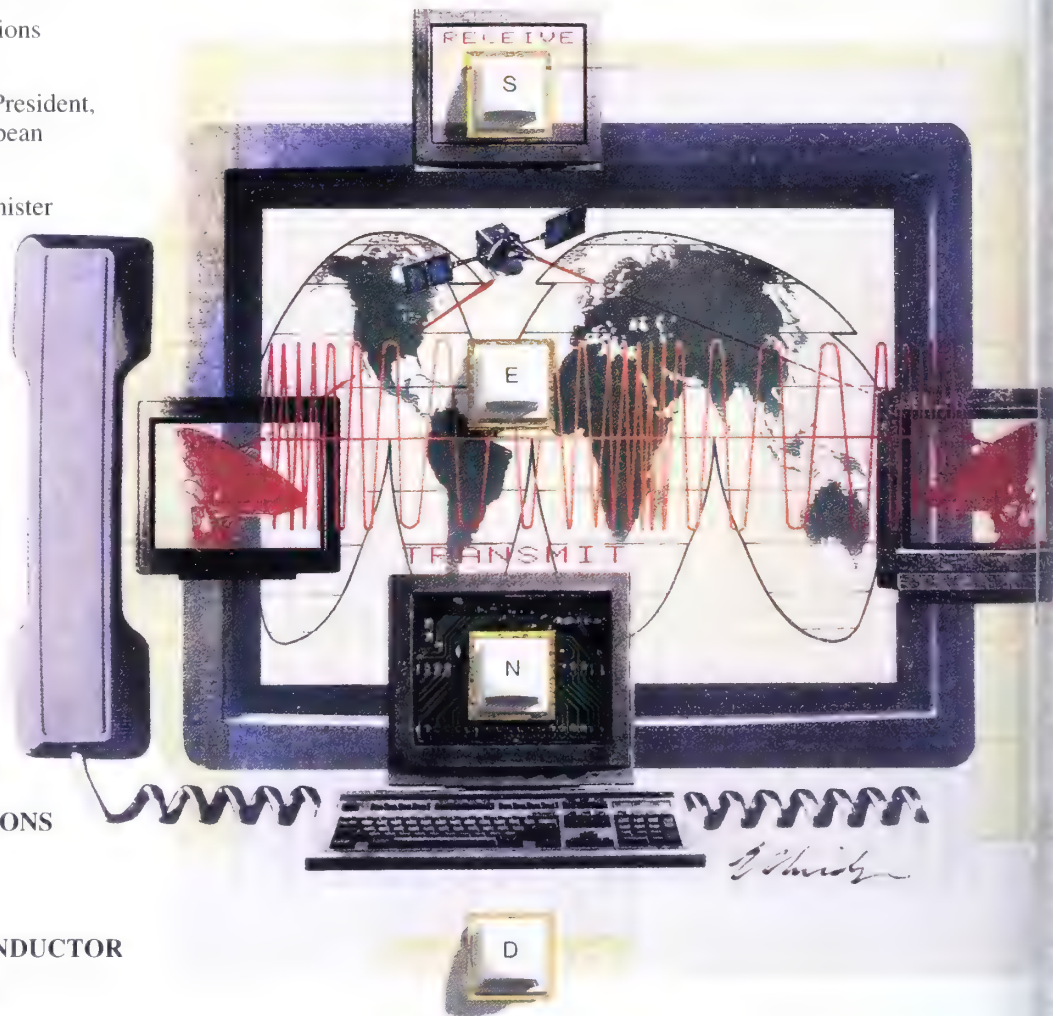
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SYSTEMS INTEGRATION IN THE AGE OF MARKET INTEGRATION

The Future of World Telecommunications



BusinessWeek

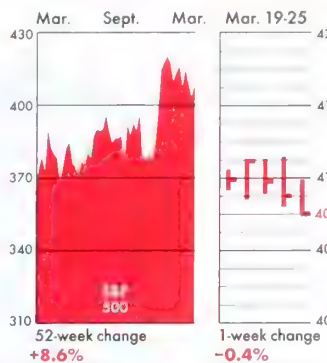
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Investment Figures of the Week

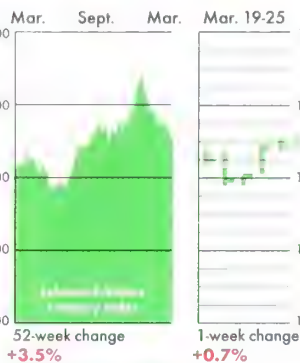
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er week in the financial
s virtually all asset class-
d water in the face of
nomic tidings. Discour-
-March auto sales data
ost to bonds on March
to an 11-point sell-off in
news of a rise in sales
homes failed to ener-
market on Mar. 25. Hous-
otel stocks continued to
ck, while gold stocks led
osers. Interestingly, mu-
are beating the market-
because of high portfolio
ions.

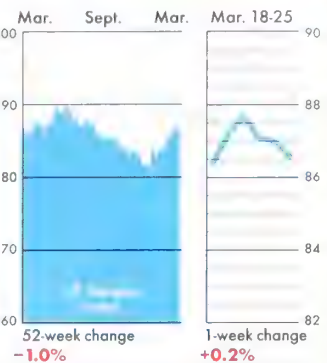
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

	Latest	Week	% change 52-week
STOCKS			
INDUSTRIALS	3259.4	0.2	11.7
COMPANIES (Russell 1000)	216.7	-0.4	10.4
COMPANIES (Russell 2000)	206.9	-0.6	21.8
COMPANIES (Russell 3000)	231.7	-0.4	11.1
FINANCIAL STOCKS			
FINANCIAL TIMES 100)	2464.9	0.0	0.0
NIKKEI INDEX)	20,226.8	2.3	-22.5
FTSE COMPOSITE)	3452.3	0.0	-1.0

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	4.09%	4.14%	6.0%
30-YEAR TREASURY BOND YIELD	7.95%	8.01%	8.3%
S&P 500 DIVIDEND YIELD	2.98%	2.98%	3.2%
S&P 500 PRICE/EARNINGS RATIO	25.4	25.5	17.5

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	399.1	398.2	Positive
Stocks above 26-week moving average	62.1%	64.0%	Neutral
Speculative sentiment: Put/call ratio	0.40	0.42	Neutral
Insider sentiment: Vickers sell/buy ratio	1.90	1.82	Positive

INDUSTRY GROUPS

	4-week	52-week	Strongest stock in group	4-week	52-week	Price
WEEK LEADERS						
FACTURED HOUSING	14.3	71.0	FLEETWOOD ENTERPRISES	15.2	90.8	46 1/2
MENTATION	11.3	69.1	HEWLETT-PACKARD	12.4	77.2	83 3/4
DISTANCE TELECOMMUNICATIONS	6.0	19.7	AT&T	7.0	21.7	40
AND MOTELS	5.9	21.7	PROMUS	13.9	57.7	30 3/4
OMERATES	5.6	11.1	ITT	11.0	23.3	66 7/8
WEEK LAGGARDS						
MINING	-13.0	-18.6	HOMESTAKE MINING	-20.0	-23.1	12 1/2
S AND LOANS	-11.0	10.5	H. F. AHMANSON	-17.6	-7.4	15 3/4
LL EQUIPMENT AND SERVICES	-7.8	-19.6	HALLIBURTON	-14.8	-51.3	23 3/4
ERING AND CONSTRUCTION	-7.3	-14.7	FOSTER WHEELER	-8.5	-10.8	26 7/8
	-5.8	39.8	STRIDE RITE	-9.9	37.3	26 1/4

MUTUAL FUNDS

	%	LAGGARDS		%
Four-week total return		Four-week total return		
ARK	4.4	MONITREND GOLD	-14.3	
CAN HERITAGE	4.2	SUNAMERICA PRECIOUS METALS	-13.9	
Y SELECT AUTOMOTIVE	3.9	STRATEGIC GOLD/MINERALS	-13.4	
52-week total return		52-week total return		
CAN HERITAGE	68.5	STRATEGIC GOLD/MINERALS	-35.5	
Y SELECT REGIONAL BANKS	62.0	FIDELITY SELECT ENERGY SERVICE	-31.0	
DM REGIONAL BANK B	58.8	G. T. JAPAN GROWTH	-24.6	



RELATIVE PORTFOLIOS

	U. S. stocks	Treasury bonds	Money market fund	Foreign stocks	Gold
at the present					
\$10,000					
one year ago					
portfolio					
ages indicate					
total returns					
	\$11,404	\$11,271	\$10,458	\$9,948	\$9,339
	-0.17%	-0.24%	+0.07%	-0.37%	-0.80%

This page is as of market close Wednesday, Mar. 25, 1992, unless otherwise indicated.
Ups include S&P 500 companies only; performance and share prices are as of market close

Mar. 24. Mutual fund returns are as of Mar. 20. Relative portfolios are valued as of Mar. 24. A more
detailed explanation of this page is available on request.

FORGING A GROWTH POLICY FOR AMERICA

Call it the light bulb theory of growth. For some years now, America's most competitive companies have been its brainiest, the ones making the supercomputers and cellular phones, the spreadsheets and the synthetic drugs—the new products that dot our high-tech lives. In the global-growth sweepstakes, these companies lead the pack, and their competitors overseas in similar cutting-edge industries have become formidable opponents. They all rely on ideas—ideas for raw materials, product designs, manufacturing processes, and, ultimately, for commercial products.

In such an environment, knowledge counts for more than capital or labor. The nations that will prosper will be those that create new knowledge best and are able to transform it most effectively into new products and technologies. The end of the cold war with its prospect of big defense cutbacks breathes new life into an old question: Should the U.S. have a policy to promote technology and industry? We say the government must have an important role in spurring the attainment of knowledge and the generation of ideas, including research and development, scientific and technical education, the diffusion of technological knowledge, and help to industry in exporting science- and technology-based products (page 70).

America needs a new growth policy for the 1990s, an industrial policy that acknowledges that ideas drive growth. Government should provide a fertile environment for individuals, companies, and industries to pursue new ideas and new techniques, and it should be willing to spend money and even lose money today in order to ensure more vigorous growth tomorrow. Supporting tuition for engineering and science students and making the research and investment tax credits permanent would be good moves. So, too, would reallocating defense R&D spending toward civilian R&D.

And because so many people across so many industries benefit from ideas that serve as building blocks for new technologies and products, it's not right to assume that individuals or individual companies can or even should shoulder all the costs of developing new ideas. Even today, the U.S. government is supporting supercomputing and biotechnology research. Some basic ideas are, in economists' parlance, public, or at least quasi-public, goods and deserve to receive public financing.

The critics will chorus that government shouldn't interfere with the marketplace. An industrial policy, they argue, puts government in the position of picking winners and losers. An industrial policy costs billions of dollars. An industrial policy smacks of central planning, the critics charge, citing the catastrophic failure of the Soviet command economy.

A coherent, knowledge-based growth policy can avoid the pitfalls the critics worry about. First, policies must be designed in such a way that no particular industries are favored. Parceling out research dollars via a scientific peer-review process and requiring business to make matching investments in some cases should protect the process from being hijacked by political interests. Shifting federal dollars out of other existing programs, such as military R&D spending, is one way to hold down costs. No, America doesn't want a Ministry of International Trade & Industry or Gosplan. But even in the former Soviet Union, the diversion of good ideas to the defense industry produced some unparalleled high-tech accomplishments, just as in the U.S., the diversion of talent and resources to the defense sector brought new advances. It's clear that when government sets out to achieve something, the returns can be high. In the post-cold-war world of ideas, industry and government can be partners for growth.

BIG SHAREHOLDERS, DO YOUR HOMEWORK

Shareholder activism, born long ago out of concern over such issues as corporate social accountability, is taking a new twist. In recent years, shareholders started using proxy resolutions to protest management-entrenchment devices and to improve corporate governance, particularly boardroom practices. Now, shareholder activism is coming to grips with deeper corporate issues. The pace-setting California Public Employees' Retirement System is targeting poor performers and broadening its range of concerns. Although still intent on making boards more effective, CalPERS is sounding off—rightly—about pay policy and corporate strategy (BW—Mar. 30). Close behind it are a few other public pension funds. New York State's fund, for instance, wants the Securities & Exchange Commission to permit big shareholders to critique corporate performance in proxy statements. Many chief executives aren't ready for this new age.

But neither are many institutional investors, who want to see the companies in their portfolios perform better. It's easy to petition a company to place only independent directors on its board's compensation committee. It's a lot more difficult to suggest that a company revamp its compensation policy or reconsider a failing diversification—ideas that require a sophisticated understanding of incentives and strategy. Yet many pension funds have tiny investment staffs, unversed in the ways of corporations. They may be sufficient to make investment decisions, but little more.

Activist shareholders want their voices to be heard. Many are too big merely to sell out their investment in companies that aren't performing. But before they follow CalPERS, they must educate themselves. Like CalPERS, they must buy or hire the expertise they don't have. Not doing enough preparation is one sure way to set back the progress of activism.

MADE THE HOTTEST
U.S. EXPORTERS

MUTUAL FUNDS

FIRST-QUARTER
PERFORMANCE UPDATE

S WEEK
April 13

BusinessWeek



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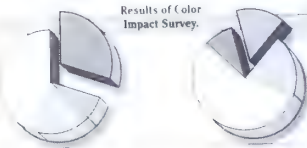
The printer with a split



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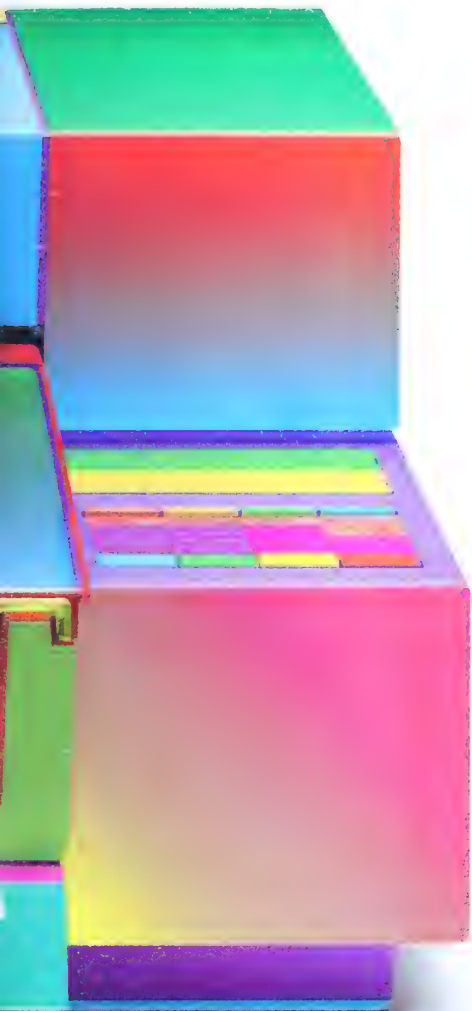
The major industry was born and grew into a highly successful one. It was the first time the progress of the industry was so clearly visible. The industry was born and grew into a highly successful one. It was the first time the progress of the industry was so clearly visible. The industry was born and grew into a highly successful one. It was the first time the progress of the industry was so clearly visible.

Results of Color Impact Survey.



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personality.



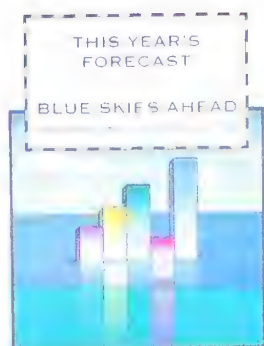
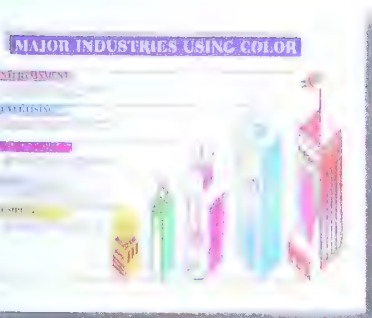
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JUSTICE IS NOT ONLY BLIND, BUT OVERBURDENED. AND THAT'S SPARKING WIDE-RANGING MOVES FOR REFORM

Cover Story

60 GUILTY!

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The OMB is out to defang costly
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THE UNTAMABLE WALLY HICKEL

At 72, Alaska's maverick governor is
aging war on Washington

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COMPUTER MARKET IS TOO FAR

Overwhelmed with faxes, phones, and
computers, small U. S. companies
are going global

The Corporation

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Little MarkAir's fight with Alaska
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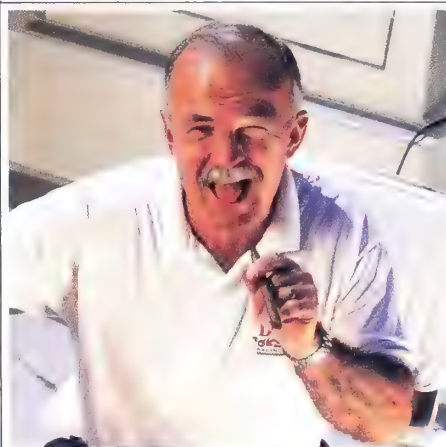
Information Processing

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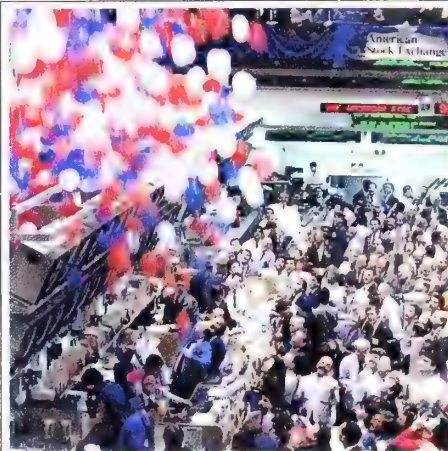
The tiny Bronx-based company has
gained notoriety for helping callers
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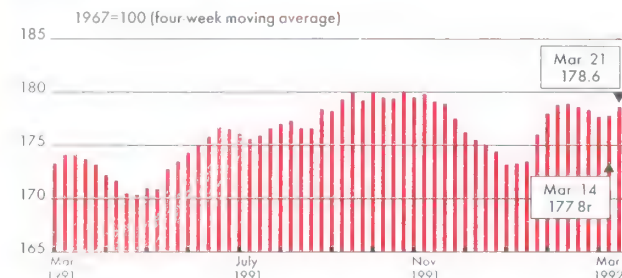
110 EDITORIALS

Private justice needs perfecting
Don't fritter away the export boom
100 economists can't be right

BusinessWeek Index

PRODUCTION

Change from last week: 0.4%
Change from last year: 2.8%

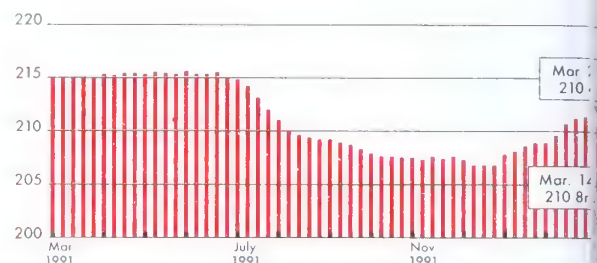


The production index rebounded modestly during the week ended Mar. 21. On a seasonally adjusted basis, output of steel, autos, crude-oil refining, paper, paperboard, and rail-freight traffic increased. Truck, coal, and lumber production declined, while electric power output was unchanged from the previous week. Before calculation of the four-week moving average, the index increased to 180.8, from the 179.4 posted the week before.

BW production index copyright 1992 by McGraw-Hill Inc.

LEADING

Change from last week: -0.1%
Change from last year: -2.1%



The leading index declined slightly during the week ended Mar. 21. Higher prices, a modest improvement in the growth rate of materials prices, and a decline in the number of business failures were slightly offset by higher bond yields. Further deterioration in the growth rates of M2 and real estate loans. Prior calculation of the four-week moving average, the index dropped to 210.4, from 210.9 in the previous week.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (3/28) thous. of net tons	1,820	1,851#	14.9
AUTOS (3/28) units	120,435	109,005r	28.9
TRUCKS (3/28) units	87,913	89,062r	43.3
ELECTRIC POWER (3/28) millions of kilowatt-hours	53,591	53,938#	5.5
CRUDE-OIL REFINING (3/28) thous. of bbl./day	13,079	13,023#	3.0
COAL (3/21) thous. of net tons	19,152#	19,057	-2.4
PAPERBOARD (3/21) thous. of tons	801.6#	790.0r	6.0
PAPER (3/21) thous. of tons	770.0#	762.0r	2.1
LUMBER (3/21) millions of ft.	519.6#	518.4	6.3
RAIL FREIGHT (3/21) billions of ton-miles	21.2#	20.7	9.8

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA, SFPA, Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (4/1)	134	133	136
GERMAN MARK (4/1)	1.65	1.65	1.67
BRITISH POUND (4/1)	1.72	1.73	1.79
FRENCH FRANC (4/1)	5.61	5.62	5.65
CANADIAN DOLLAR (4/1)	1.19	1.19	1.16
SWISS FRANC (4/1)	1.51	1.50	1.41
MEXICAN PESO (4/1)	3,047	3,054	2,983

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (4/3) \$/troy oz	344.000	341.250	-4.2
STEEL SCRAP (3/31) #1 heavy, \$/ton	84.83	89.50	-16.8
FOODSTUFFS (3/30) index, 1967=100	201.9	204.8	-4.8
COPPER (3/28) ¢/lb.	106.0	105.8	-4.9
ALUMINUM (3/28) ¢/lb.	59.0	60.4	-11.7
WHEAT (3/28) #2 hard, \$/bu.	4.43	4.38	48.7
COTTON (3/28) strict low middling 1-1/16 in., ¢/lb.	53.44	51.70	-29.5

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (3/27) S&P 500	407.53	409.24	
CORPORATE BOND YIELD, Aaa (3/27)	8.36%	8.38%	
INDUSTRIAL MATERIALS PRICES (3/27)	96.7	96.4	
BUSINESS FAILURES (3/20)	445	465	
REAL ESTATE LOANS (3/18) billions	\$401.5	\$403.0r	
MONEY SUPPLY, M2 (3/16) billions	\$3,444.1	\$3,446.7r	
INITIAL CLAIMS, UNEMPLOYMENT (3/14) thous	447	432r	

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Street (failures of large companies), Federal Reserve Board, Labor Dept. CIBC seasonally adjusted data on business failures and real estate loans.

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
CONSTR. SPENDING (Feb.) annual rate, billions	\$406.2	\$407.9r	
12 LEADING INDICATORS COMPOSITE (Feb.) index	147.6	146.5	
PERSONAL INCOME (Feb.) annual rate, billions	\$4,972.4	\$4,918.1r	
CONSUMER SPENDING (Feb.) billions	\$4,030.8	\$3,993.7	

Sources: Census Bureau, Commerce Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (3/16)	\$943.4	\$939.6r	
BANKS' BUSINESS LOANS (3/18)	289.9	289.3r	
FREE RESERVES (3/18)	416r	883r	
NONFINANCIAL COMMERCIAL PAPER (3/18)	141.4	139.4	

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (3/31)	4.07%	3.86%	6.0
PRIME (4/1)	6.50	6.50	9.0
COMMERCIAL PAPER 3-MONTH (3/31)	4.28	4.32	6.2
CERTIFICATES OF DEPOSIT 3-MONTH (4/1)	4.19	4.22	6.1
EURODOLLAR 3-MONTH (3/28)	4.26	4.30	6.3

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart), other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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The Vitality of Taiwan's Society



The Six-Year National Development Plan will spend over US\$300 billion.

"Within the framework of our Six-Year National Development Plan...we can attain a great status in the Western Pacific...[and] establish ourselves as a major Asian financial center."

— President Lee Teng-hui

The people of the Republic of China on Taiwan have worked hard to achieve economic prosperity and a democratic society. Now, they're ready for the next phase in their country's evolution.

The Six-Year National Development Plan will spend



Taipei Intern 01

Moves with a World Vision



not just looking inward. They are also ready to play a bigger role on the international stage and help less developed nations achieve their economic potential.

The Republic of China is already a major player in regional organizations like the Asian Development Bank. It has formally applied for membership in GATT, and is seeking to enter other international economic, cultural, and humanitarian organizations.

The country is also providing substantial aid to less developed countries through its US\$1.1 billion International Economic Cooperation and Development Fund and through its disaster-relief program for victims of natural disasters.

This is just the start of a new era in the Republic of China's evolution. Its people are determined to accept their obligations as responsible members of the international community.

Their aspirations are represented by the Taipei International Convention Center... where people from different nations can meet and share their experiences to help the development of a new world order based on peace, progress and prosperity.

over US\$300 billion on 775 projects by 1996. It will boost the Republic of China's industrial potential, increase national income, and improve the quality of life. The projects will cover transportation and communications, urban development and housing, energy, culture and education, social welfare and security, environmental protection, science and technology, flood control, and healthcare.

The Plan also provides an enormous opportunity for foreign investors to participate in these projects.

But the people of the Republic of China on Taiwan are

TODAY'S TAIWAN



REPUBLIC OF CHINA



Source: SMRB 1991 & Business Week estimate for BW International.

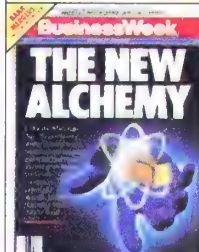


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The Vitality of Taiwan's Fin



Taiwan is now working towards a more equitable balance of trade.

Over the last four decades, the world has witnessed Taiwan's economic miracle.

The per capita GNP of the Republic of China on Taiwan has grown from US\$145 in 1951 to over US\$8,000 in 1990. And today the Republic of China ranks as the world's fifteenth largest trading nation.

Now, the Republic of China is looking for more effective ways to cooperate with other countries and to share its prosperity with less developed nations.

From being a country that focuses strongly on exports,



Taipei World Trade

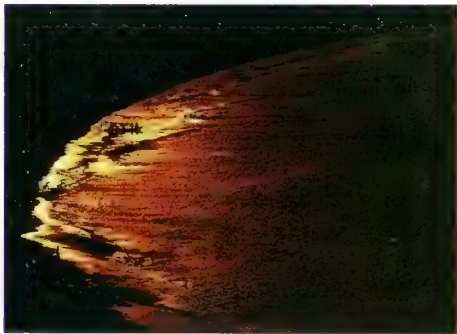
.....Moves to Center Stage



by helping other countries take over the export market for labour-intensive products.

At the same time, the Republic of China has introduced a wide range of incentives for investors from abroad. And newly-liberalised laws welcome foreign investment in finance, banking and insurance. Foreign banks are permitted to offer the same range of services as local banks.

Taiwan's stock market, too, is now open to international brokerage firms. Local citizens can, for the first time, invest in international financial markets.



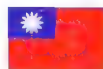
Actions like these speak louder than words, as the Republic of China becomes a more active member of the international community and plays a bigger role on the world financial stage.

the Republic of China is now working towards a better balance of trade.

The government has made several tariff cuts to encourage imports, particularly from the U.S. and third world countries. (Proof of this two-way trade policy is the Import Fair held in Taipei.)

Local companies are encouraged to invest in other countries. For instance, many firms making products intensive in unskilled labour have moved to Malaysia and Thailand. The Republic of China wants to spread its prosperity

TODAY'S TAIWAN



REPUBLIC OF CHINA

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WHO NEEDS TO KNOW WHAT AT THE JOB INTERVIEW

Regarding your review, "The pregnant silence in Corporate America" (Books, Mar. 9), it's quite obvious that the interviewer who "really needs to know" if the 22-year-old female applicant plans to have children would never hire a woman in any case.

So a better answer to his [the interviewer's] question might be: "Before I promise to work here forever, to forgo matrimony, parenthood, taking time off to write a novel, contracting debilitating illnesses—what I really need to know is if management has any plans to sell this paper to someone who might spin it off or close it down, leaving me jobless and pensionless when I'm too old to find comparable employment."

Author Felice Schwartz is living in a time warp of the 1970s and early 1980s. Recent events have shown that so-called corporate career tracks are easily superseded by other more powerful game plans. Young people entering the job market should just do what they have to do to get started and take care of their own careers. It has already been demonstrated that Corporate America isn't going to do it for them.

Marilyn Rosenfeld
New York

WHAT MERIT PAY CAN —AND CAN'T—DO

Although your recent article "Merit pay for teachers may not have much merit" (Top of the News, Mar. 9) focuses on the economic, political, and threatening aspects of pay-for-performance programs, it leaves a basic question unanswered: Can incentive-pay programs help improve the quality of American education? I believe they can, and despite the tone of your article, these plans should not be abandoned.

When interviewed by the author of the article, I spoke as a Fairfax County merit-pay teacher with over 20 years experience and indicated that I see the future of education linked to two factors: reducing class size and improving teaching quality. In analyzing the merits of

merit pay, a careful look at what it can and cannot do must be taken.

The article notes that improvements in student performance do not seem to correlate to the existence of merit pay. The fact is that all the merit pay in the world cannot make even the most skillful teachers into magicians. With class size on the increase, available resources for classroom use on the decrease, the deep social issues that interfere with many students' readiness to learn, and lack of parental involvement, it is absurd to think that the existence of merit pay alone can compensate. Until these other issues are also dealt with, linking student-performance results to merit pay is neither fair nor realistic.

Tina Yalen
Reston, Va.

It is no easier to define the objectives of many kinds of work in business than it is to define the objectives of teaching. But the need to do it and get it right, is more often recognized in business operations because of its bearing on profits. But are we not also seeking a measurable form of profit in education?

Arnold S. Daniels
Newton, Mass.

ESPRIT DE CORP: WIN SOME, LOSE SOME

The article "Will politically correct sell sweaters?" (People, Mar. 16) on Susie Tompkins and Esprit de Corp was a frustrating, superficial treatment. Social responsibility should not be confused with "political correctness"; nor should socially responsible leadership be equated with unsophisticated business practices. Profits and ethics are not incompatible. The topic of corporate social responsibility deserves serious attention, and Tompkins deserves credit for being an innovator in this area.

Donna J. Wood
Associate Professor
of Business Administration
University of Pittsburgh
Pittsburgh

I had never heard of the company Esprit until my wife went into an outlet store near Palm Springs, Calif. While we

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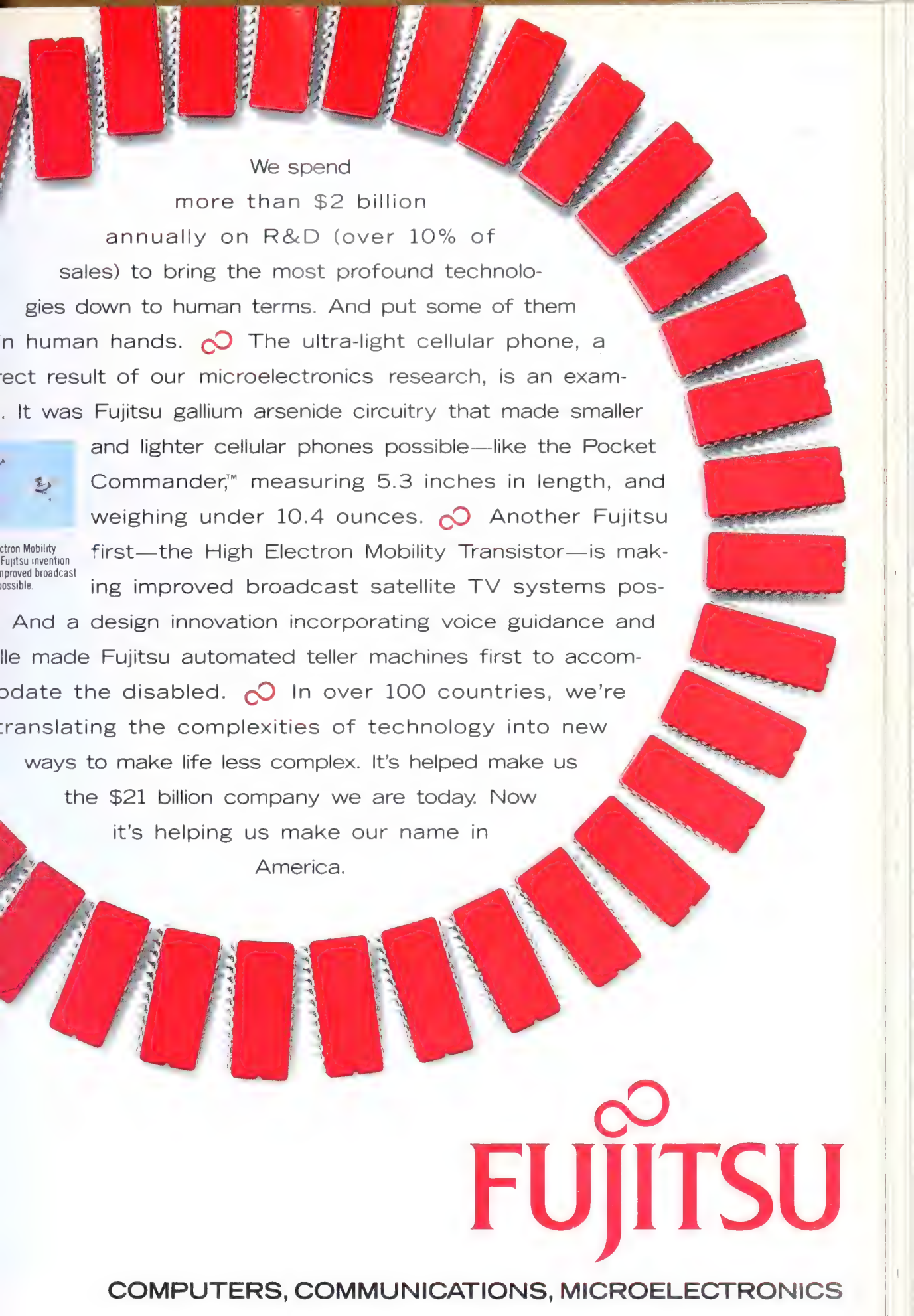
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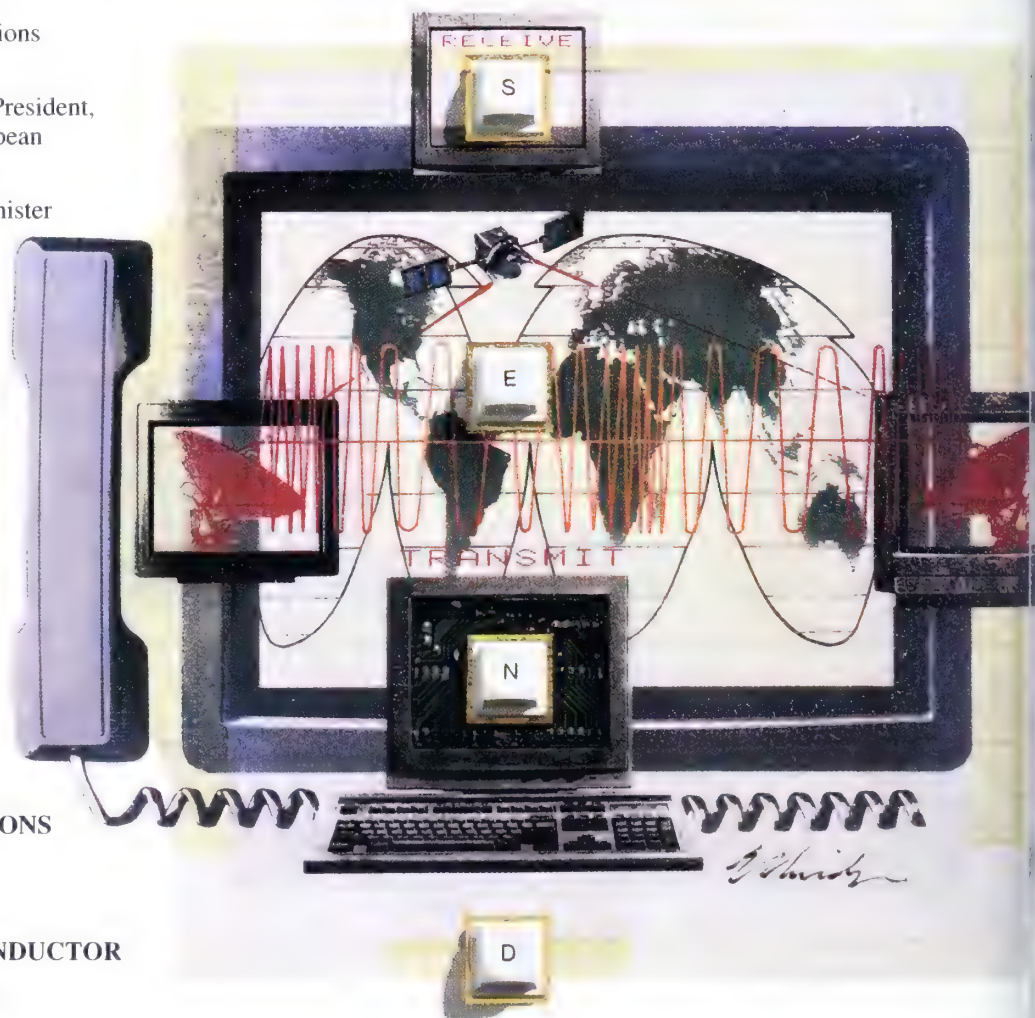
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SYSTEMS INTEGRATION IN THE AGE OF MARKET INTEGRATION

The Future of World Telecommunications



Readers Report

Inside the store, I noticed the advertising campaign that you mentioned in your article, and specifically one poster of a young lady was saying that she would "Defend a woman's right to abortion unless George Bush was free to do the same."

Noting that my spouse is virulently pro-abortion and hoping to discourage him from spending money in the store, I showed her the poster. We left without buying anything.

Other clothing stores had ads that could so readily discourage my spending.

Joel Beckman
Downey, Calif.

VALUE JUDGMENTS VALUE LINE

Correct the statement regarding Jean B. Buttner working for me in an interior-design firm ("Value Line: Too good to mean?" Finance, Mar. 16): I am not of a successful telecommunications-manufacturing company and have not owned or operated an interior-design firm; Jean Buttner never worked for me.

Your article is patently slanted with editorial input from disgruntled former organization members. A more balanced review of the venerable Value Line and its success of its staff and management over a period of six decades would give our readers a clearer picture of the company.

E. M. Buttner
President and CEO
Coastcom
Concord, Calif.

Note: E. M. Buttner is Jean Buttner's ex-husband. During their marriage, Jean Buttner had her own interior decorating firm.

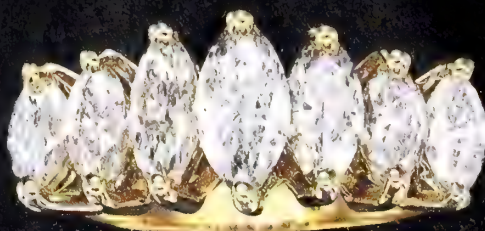
Go on your profile of Value Line, where I worked briefly as a reanalyst before resigning my position in November, 1991.

My wife loves a recession as Buttner does. These hard economic times give me the opportunity to discharge employees, the sole reason that she can keep them with lower-skilled and lower-paid workers from her infamous "résumés" that collect on her

John S. Orrico
New York

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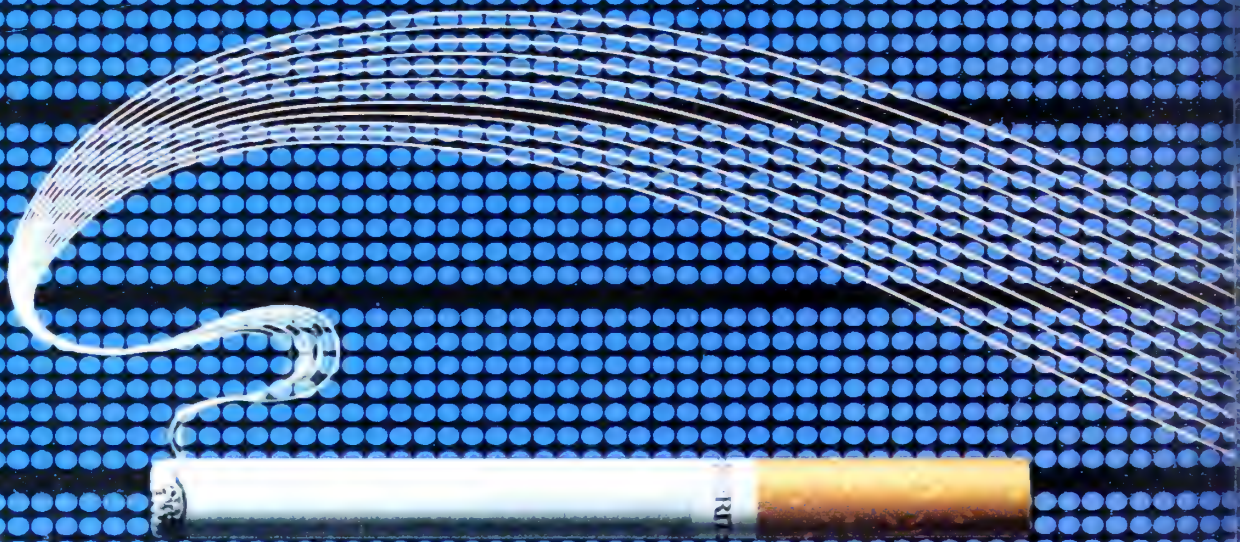
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Books

A FULL SERVICE BANK: HOW BCCI STOLE BILLIONS AROUND THE WORLD

By James Ring Adams and Douglas Frantz
Pocket Books • 331pp • \$22

DIRTY MONEY: BCCI, THE INSIDE STORY OF THE WORLD'S SLEAZIEST BANK

By Mark Potts, Nicholas Kochan, Robert Whittington
National Press Books • 274pp • \$21.95

HOW DID SO MANY GET AWAY WITH SO MUCH FOR SO LONG?

There has never been a bank like BCCI. And a lot of investors, depositors, and regulators hope there will never be another one. The Bank of Credit & Commerce International was at the center of history's biggest banking scandal. It pursued a startling array of skulduggery, including money-laundering, larceny, and bribery. It routinely consorted with terrorists, drug dealers, dictators, smugglers, mobsters, and spies. Regulators finally shut BCCI down on July 5, 1991. Losses to investors and depositors may reach \$20 billion.

A Full Service Bank and *Dirty Money* are the first of several books aiming to unravel BCCI's convoluted rise and fall. Although well worth perusing, they are but first drafts of the full tale.

BCCI was founded in 1972 by Agha Hasan Abedi, a charismatic Pakistani,

who saw BCCI as a bank for the Third World, especially oil-rich Middle East nations. He structured BCCI to avoid regulation. Although headquartered in London, it was chartered in Luxembourg and operated through a vast network of offshore entities. BCCI grew rapidly during the 1980s, setting up outposts in 70 countries. Its downfall stemmed from several forces: bad loans, massive trading losses, inept management, and embezzlement. Accountants suggest it may never have been profitable. The coup de grace was a belated but inexorable assault by prosecutors and regulators.

A Full Service Bank, by free-lance financial writer James Ring Adams and *Los Angeles Times* correspondent Douglas Frantz, is the more absorbing of the two books. It focuses on the heroes who helped bring BCCI down, particularly

Robert Mazur, a dedicated U.S. Customs agent whose routine drug money-laundering investigation led to BCCI's 1990 conviction for money-laundering. Also instrumental was congressional investigator Jack Blum. Unable to intercede with federal prosecutors in his extensive evidence of BCCI's illicit activities, he went to New York District Attorney Robert M. Morgenthau, whose well-publicized probe finally spurred the government's assault. Even though the tales of the men make for a fast-paced read, they end up overwhelming *A Full Service Bank*. Many of Mazur's exploits, which consume more than a third of the book, are related to BCCI only marginally.

Dirty Money, by Washington Post writer Mark Potts and British journalists Nicholas Kochan and Robert Whittington, lacks the narrative drive and graceful writing, and detailed source notes of *A Full Service Bank*. But it provides a much broader picture of BCCI's maneuverings, especially Abedi's political influence-peddling.

Abedi was a genius at co-opting friends and buying people. Through everything from free plane rides and interest-free loans to outright bribes, he duped or bought off political leaders

This is an offer



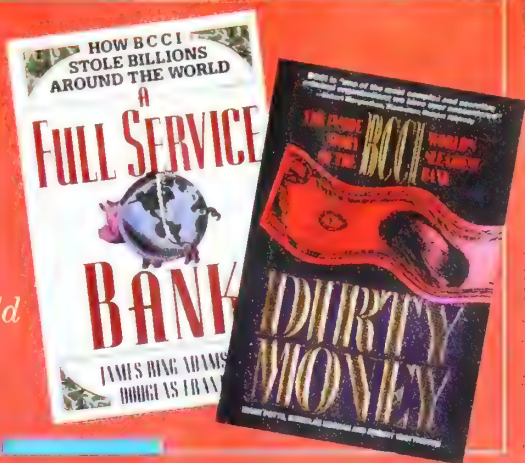
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influence-peddling
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the globe. His most notable un-
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M. Clifford and his protégé Robert
man to engineer BCCI's secret, ille-
takeover of three U.S. banks, most
y First American Bankshares in
ngton. Although Clifford and
a were top executives at First
an, as well as lawyers for BCCI,
assist implausibly that they didn't
BCCI controlled First American.

For all their detail, the two books
raise almost as many questions as they
answer. Topping the list is why regula-
tors, intelligence agencies, auditors, and
prosecutors were so slow to take action,
despite abundant signs of BCCI's chican-
ery for years. The Justice Dept. sought
to thwart Morgenthau's probe. Lack of
resources and simple oversight were
partly to blame. But *Dirty Money*, with
some justification, attributes the prob-
lem to influence-peddling, which may
have been even more pervasive than is

currently known. The authors say: "Per-
haps [the scandal] reached into the high-
est levels of political power around the
world in ways that would dwarf even
the wildest conspiracy theory."

The extent of the corruption at BCCI is
also unresolved. Was the bank an essen-
tially legitimate institution that, under
financial pressures, veered into criminal-
ity? Or was it, as Morgenthau put it, "a
corrupt criminal organization through-
out its entire nineteen-year history"?
Both books are ambivalent. *A Full Ser-
vice Bank* says: "The bulk of its busi-
ness was devoted to gathering deposits
from legitimate customers and financing
legitimate international trade." But at
another point, it calls BCCI the "world's
greatest Ponzi scheme."

More BCCI books are due out later this
year, including one by Jonathan Beaty
and S. C. Gwynne of *Time* magazine and
another by Peter Truell of *The Wall
Street Journal*. They may offer more
answers. But for now, much about BCCI
is very unclear. As Morgenthau said at
the end of 1991: "I may have exaggerat-
ed when I said we were at the tip of the
iceberg last summer. We may not be
that far."

BY CHRIS WELLES

Senior Editor Welles is BW's resident scan-
dal watcher.

should sleep on.



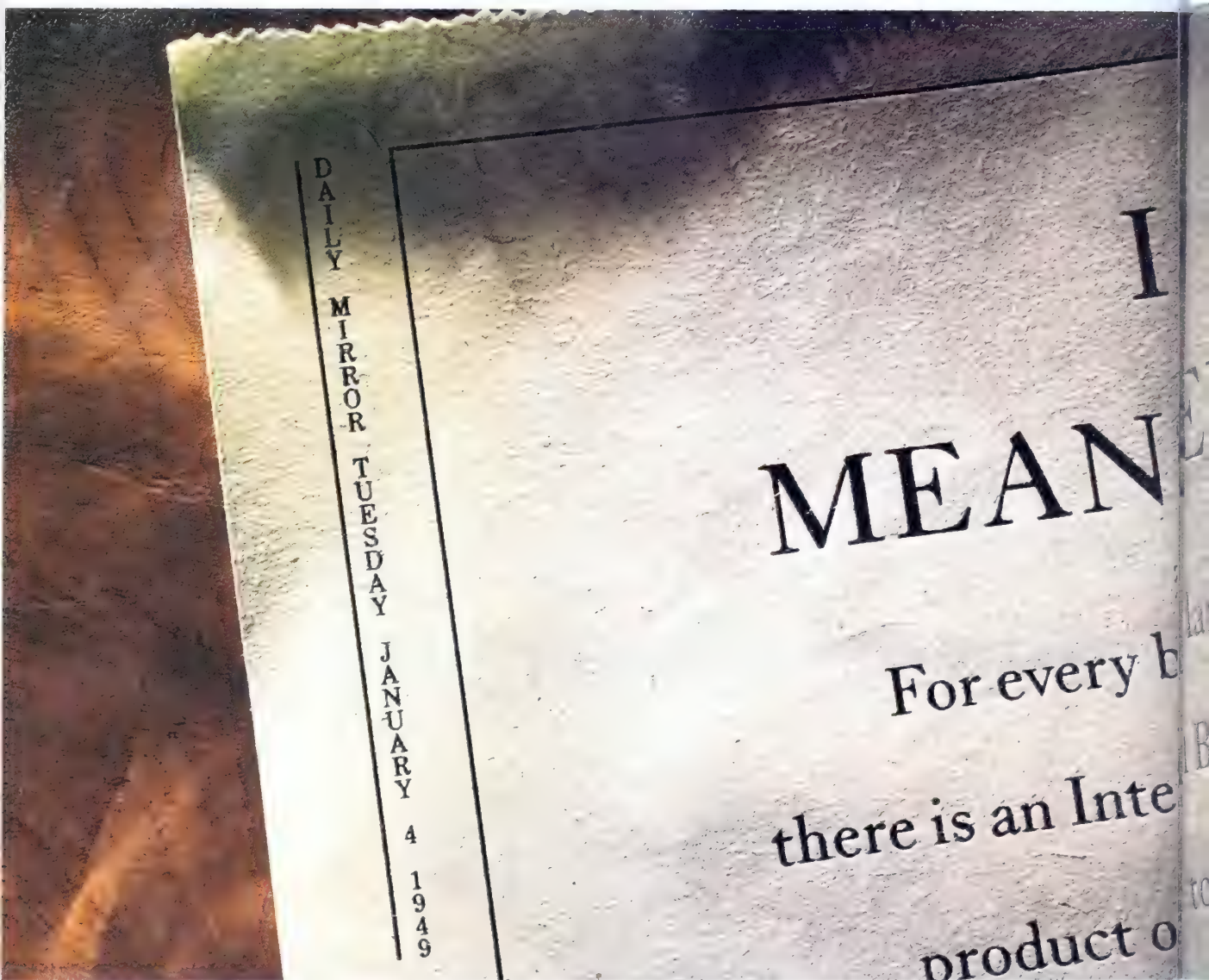
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a centers, lock, stock and barrel.
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AMERICA IS SAVING MORE NOW, NOT LESS —IF YOU COUNT IT RIGHT

BY ROBERT KUTTNER



Is Commerce using a faulty statistic? When you include capital gains, pension contributions, and increases in home equity as savings, it turns out that the rate actually jumped in the 1980s

One of the articles of faith concerning America's economic distress in recent years is the belief that the U.S. has suffered from a savings shortage. Insufficient savings means the U.S. does not have enough funds to invest. A scarcity of capital—relative to demand—in turn requires users of capital to pay higher rates for it or to borrow money from abroad. In the usual analysis, the large federal budget deficit figures as an additional source of "dissavings," since borrowing by the government soaks up a private savings supply that is meager to begin with. This analysis is virtually bipartisan: Democrats tend to attribute the problem to the deficits generated by faulty supply-side economics. And Republicans blame it on Democratic spending programs and the absence of more incentives to save and invest.

According to the Commerce Dept., the savings rate dropped from 7.5% of disposable personal income in 1981 to just 2.9% in 1987. It turns out, however, that the apparently low rate may be just an erroneous statistical artifact. As Fred Block of the University of California at Davis has pointed out in a series of papers, Commerce calculates the savings rate by subtracting total consumption from total measured consumer income. That seems logical enough. But, as Block observes, it omits three of the most important sources of actual savings: realized capital gains, net additions to Social Security trust funds, and savings accumulated in the form of equity buildup in owner-occupied homes.

LARGER SLICE. As everybody knows, rich people own a disproportionate share of the nation's total savings supply—since the poor consume most of what they earn. Only the well-off save and invest a large fraction of their incomes: That's the justification for supply-side tax incentives, which are often criticized as rewarding the wealthy. Everybody also agrees that the 1980s were a period when capital-gains income increased significantly and when the rich gained an even larger slice of the national income pie. As Block observes in his most recent article, written with Robert L. Heilbroner and published in this spring's issue of *The American Prospect* (which I co-edit), capital gains rose from \$21.3 billion, or 3% of disposable income in 1970, to a 1986 peak of \$295.8 billion, or 9.8% of personal income. As Block and Heilbroner comment: "No plausible measure of the national saving rate should ignore this immense addition to the financial investment power of households, or more accurately, to the households at the apex of the income pyramid."

Since the well-off save disproportionately,

total national savings could hardly have dropped during a period when the well-to-do reaped enormous capital-gains windfalls. During the 1980s, middle-class incomes stagnated and savings by the middle class probably dropped. But the decline in the relatively modest savings of the middle class was more than offset by the increase in the capital-gains savings (and savings) of the well-to-do.

During the 1980s, the accumulation of pluses in Social Security accounts was a major contribution to collective national savings. However, Social Security savings and home equity buildup are both omitted from the official Commerce Dept. calculations. In 1980, increases to Social Security funds equaled about 1% of personal income. By 1988, they were more than 3%. The concept of "housing savings" is somewhat controversial, since equity in a home is not in a financially liquid form. Though in the 1980s, it became rather more liquid through the device of home-equity loans. (These loans, incidentally, show up on the national balance sheet as a charge against measured household savings, when in reality they are a charge against unmeasured home savings.)

YAWNING DEFICIT. Even when the figures are adjusted only for capital gains, Block and Heilbroner find that total savings for the year 1984-88 were significantly higher than during the early 1980s, despite Commerce statistics that show savings plummeting. If capital gains are counted, they more than double the official measure of savings. For example, the total supply of savings would be \$300 billion rather than the paltry \$145 billion that was reported. With this revised measurement, savings rose up in the 1980s.

But what of the monstrous federal deficit? One can hardly open a newspaper without reading that the deficit consumed most of the available savings supply. So didn't the savings rate still fall? Wrong again, say Block and Heilbroner. As Heilbroner observes, federal spending is not a source of savings or dissavings. Instead, it is a use of savings, just as the private-sector decision to invest savings in a new factory or to spend it on 10,000 television sets is a use of savings. And, Heilbroner adds, since the federal government lacks a balanced capital budget, we really don't know what fraction of federal spending went for investment and what fraction for consumption. National accounts arbitrarily treat all of federal consumption as a use of savings. The implication of these statistics for national policy is profound, since they shatter a core assumption about what affects the economy. This will be the subject of the next column.

ROBERT KUTTNER IS CO-EDITOR OF THE AMERICAN PROSPECT AND AUTHOR OF THE ECONOMY CAN WAIT



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BY GENE KORETZ

WHY JUMPS IN COMMODITY PRICES SPELL REBOUND

Economists, eager to confirm the recession's demise, have been keeping an anxious eye on industrial commodities. The reason: No recovery has ever taken place without an appreciable firming of industrial raw-material prices, which usually spurt higher as rising demand lifts the economy out of recession.

Until recently, the picture was ambiguous. The *Journal of Commerce's* price index of 18 industrial commodities, for example, rose sharply early in the year,

INDUSTRIAL MATERIALS KEEP ON CLIMBING



but hit a plateau in February and early March. And the Commodity Research Bureau's widely watched spot-price index of 13 industrial raw materials continued to slide until late February.

In mid-March, however, materials prices began to rise again, with both the *Journal of Commerce* index and the Commodity Research Bureau's measure touching their highs for the year in the last week of the month. Joining the parade to higher ground have been such cyclically sensitive materials as rubber, lumber, copper, zinc, tin, aluminum, and steel scrap.

Indeed, if the latest price jump heralds a more vigorous upswing, then several developments should follow in short order: First, purchasing agents, who have been keeping their stocks at razor-thin levels, should start to build inventories—both to meet rising demand and to beat future price hikes. Second, materials prices should continue to rise in response to growing inventory demand. Finally, such price hikes should boost the profitability of suppliers.

The biggest threat to the recovery as this scenario unfolds is that fear of inflation may spook the financial markets and cause a premature shift toward restraint by the Federal Reserve. In fact, several economists have recently warned that inflationary pressures are rising.

Edward Yardeni of C. J. Lawrence Inc. notes, however, that relatively little commodity inflation at the start of a recovery is normally passed on to consumers. "Companies find that productivity gains more than offset their materials costs, allowing them to earn more while limiting price hikes," he says.

Meanwhile, continuing economic slowdowns overseas, particularly in Germany and Japan, should put an anchor on materials prices, even as the U.S. recovery quickens. Indeed, in light of the ongoing sale to the West of vast stockpiles of materials by the former Soviet Union, the threat of accelerating commodities inflation appears negligible.

LIFE EXPECTANCY: HOW SOME LOW-INCOME NATIONS BEAT THE ODDS

It's almost axiomatic that people in rich countries usually enjoy better health and live longer than those in poor countries. North America's average per capita income is nearly \$20,000, for example, and its life expectancy is 75 years, while per capita income in Africa is \$600, and life expectancy is 52 years.

With so many developing countries mired in relative poverty, however, it's the exceptions to this rule that matter most for improving world health. So argue physicians W. Henry Mosley and Peter Cowley of Johns Hopkins University in a recent report, *The Challenge for World Health*, published by the Population Reference Bureau. The two researchers note that a number of poor nations have life expectancies almost as long as wealthy countries do.

In China and Sri Lanka, for example, per capita figures for gross national product are just \$330 and \$420, respectively. Yet the life expectancies in 1990 were 70 and 71 years. Similarly, Jamaica, Chile, Costa Rica, and Malaysia all have per capita GNPs of under \$2,000 and life expectancies of at least 70 years.

What accounts for this performance? Mosley and Cowley note that the poor nations with high longevity share two key characteristics: high literacy levels among women as well as men, and low fertility rates. While family planning may help in some instances, the researchers observe that educated women tend to have fewer children because

their roles in society are not restricted to childbearing and child-rearing.

Good health, concludes the study, can be achieved at relatively low cost. "But it requires strong political and social commitment, especially to improve women's education and to ensure equal access to health care."

A ROUSING SURGE IN BUSINESS CONFIDENCE—EXCEPT AT THE BANK

Suddenly, with the advent of spring optimism is busting out all over—nearly all over. Surveys indicate that both the public and business leaders are feeling a lot better about the economy.

So who's unhappy? Just the group that presumably has its fingers on the financial pulse. According to a new nationwide survey of banking chief executives by Grant Thornton, the management consulting firm, 52% think the U.S. economy is still caught in recession. What's more, 46% of the 600 top bankers interviewed believe the recession will last until 1993. And though 45% say a recovery is now developing, only 7% expect the whole economy to emerge from recession before midyear.

About the only bright spots in the survey were bankers' views on inflation and their own earnings. Less than a third feel inflation will accelerate this year. And 58% expect rising profits with only 12% anticipating a decline.

THE MIDDLE CLASS IS SHRINKING—JUST ASK UNCLE SAM

In the past two decades, more people have moved into both the lower and upper ranges of income. That's the conclusion of a new Census Bureau report that looks at the number of individuals who live in low-income households (those persons with less than half the median income, adjusted for family size) and richer households (with incomes at least twice the median level).

From 1969 to 1989, the low-income proportion of the population grew from 17.9% to 22.1%, and the high-income group rose from 10.9% to 14.7%. While the percentages of whites in the low- and high-income groups in 1989 were similar—18.8% and 16%, respectively—the income distribution among blacks and Hispanics was far more skewed. On 5% had high incomes relative to the U.S. median of \$37,152 for a family of four, while 40% to 44% had low income



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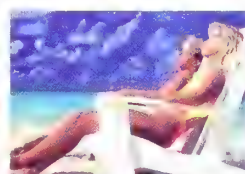
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BusinessWeek

WHAT A SPRING CONSUMERS' STEPS?

April, when hope springs eternal and a forecast of recovery turns to thoughts of recovery. Maybe it's the time of year, but there are rumblings of a mood swing out there. Both households and businesses are increasingly optimistic. Are people just getting over the winter slump, or are they finally getting out of the doldrums?

The pessimism that ruled the attitudes and actions of businesses and consumers during the past year is rooted in real economic distress. Now, heightened optimism undoubtedly reflects some degree of economic improvement that people can see and feel. Two signs: Businesses are seeing healthier profits, and consumers are feeling fatter wallets.

Further evidence comes from the Commerce Dept.'s leading indicators. The composite of 11 separate indicators that foreshadow business activity rose 0.8% in February, following a 1% jump in January. Those strong gains, following five months of no growth, are a good sign that better times are ahead.

Consumers aren't dancing in the street, mind you, but their spirits are higher. The Conference Board's index of consumer confidence rose to 54 in March from 47.3 in February (chart). The University of Michigan's index of consumer sentiment improved as well, rising to 76 from 68.8 in February.

The Conference Board said that attitudes about households' economic situation remain downbeat. In particular, almost all those surveyed think jobs are "hard to get," the same bleak feeling as in February. The labor market is still a long way from the recovery's sustainability. Without strong job and income growth, this rebound could peter out as easily as the one last spring.

However, as was true with the Michigan report, most of the optimism in the Conference Board's index reflects optimism about the economy over the next six months. That's important because the reading of expectations has been a reliable forecasting gauge.

A big reason why consumers feel hopeful about their future is the extra cash in their wallets right now. Personal income surged by 1.1% in February, led by a 1.3% jump in wages and salaries. After adjusting for taxes and Social Security, real disposable income was up a healthy 0.7%. Not too long after a 0.9% jump in December, the

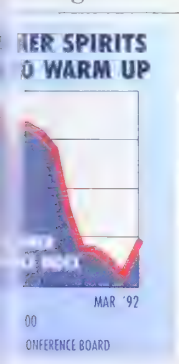
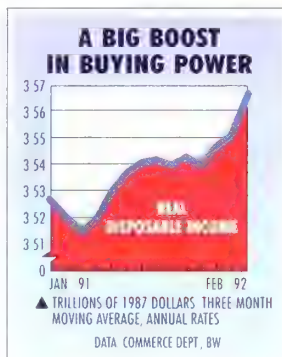
February gain in real earnings shows household buying power is clearly on the rise (chart).

The flood of mortgage refinancings that took place from late December to February is also funneling more money to consumers. Plus, the amount of tax refunds already paid out by the Treasury Dept. is almost twice what it was in January and February of 1991. With all that extra cash, it is no surprise that consumers went on a mini-shopping spree in the winter.

Real consumer spending jumped 0.9% in January and then increased by 0.6% in February. Big-ticket items, including cars, appliances, and furnishings, did extremely well.

Spending in March probably retreated. Unseasonably cold weather in many parts of the country hurt retail shopping. But even if real spending fell by 0.5% last month, real consumer outlays in the first quarter would increase at an annual rate of close to 5%. If so, that would be the largest gain in consumer purchases in four years, virtually guaranteeing a healthy uptick in the real gross domestic product in the first quarter.

Consumer spending is also likely to shift to a lower speed in coming months because income growth hasn't picked up as much as buying has. Even with the large February gain in pay, real disposable income is rising at a pace of only about 2.5% in the first quarter. And refinancings, which soared when mortgage rates were at 8%, have slowed to a trickle now that rates are up to 9%.



HOME SALES TAKE A BREATH

Rising interest rates add some risk to the housing rebound. But for now, it appears that higher rates will only restrain the sector's recovery, not derail it. Sales of new single-family homes slipped by 2.7% in February, to an annual rate of 613,000. But that followed an 11.1% jump in January, so home sales so far in the first quarter are running well ahead of their fourth-quarter pace.

Higher mortgage rates prevented some consumers from buying a home in February. Plus, house-hunters may be waiting to see if Congress enacts the White House proposal for a \$5,000 tax credit for first-time home buyers. That plan seems unlikely to pass, but mortgage rates could ease down a bit by the summer. If so, home buying will pick up this quarter.

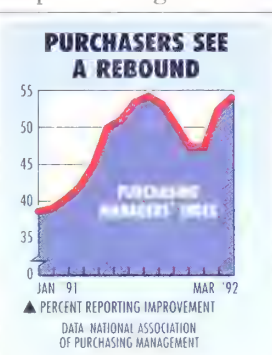
That means homebuilders will remain busy because

Business Outlook

demand could outpace the number of homes on the market. The inventory of unsold new homes fell to a 5.2 months' supply in February—the leanest inventory in nearly six years. And that's boosting builders' spirits.

PROFITS ARE READY FOR AN UPTURN

Consumer optimism is contagious, because spending by households generates two-thirds of GDP. So it's easy to see why executives are feeling better about their businesses. A Dun & Bradstreet Corp. survey taken in February shows that virtually all industries and regions expect stronger sales and profits in the second quarter.



Moreover, the March report from the National Association of Purchasing Management looks upbeat. The NAPM's index of industrial activity rose to 54.1% last month, up from 52.4% in February (chart). A reading of more than 50% means that manufacturing is recovering. The purchasers said that while companies are not yet expanding their payrolls, new orders

rose sharply for the second consecutive month. That's a good omen for future gains in jobs and output.

The promise of better profits is a chief reason for executives' rising optimism. In fact, businesses' bottom lines had already begun to look a little stronger at the end of 1991. The Commerce Dept.'s comprehensive roundup of fourth-quarter corporate profits shows that earnings before taxes dipped 0.3%, to \$317.2 billion, but there's more to the story.

Operating profits—adjusted for depreciation allowances and inventory values—rose 3.4%. That means better cash flow. Operating earnings posted their largest quarter-to-quarter rise in three years. They now stand 6.9% taller than a year ago. Further gains seem assured.

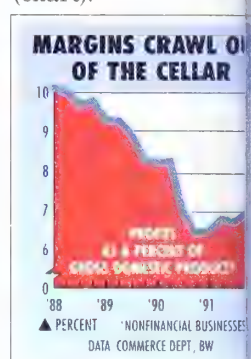
Lower interest rates have helped to lift cash flow by cutting interest costs on debt. In particular, they have allowed companies to replace costly short-term debt with cheaper long-term debt. Interest as a percentage of cash flow for nonfinancial businesses has fallen from a record 34.5% a year ago to 29.9% in the fourth quarter. And the Federal Reserve's big rate cut on Dec. 20 undoubtedly resulted in a further decline in the first quarter.

Corporate America's profit margins are also beginning to improve. That could pay off big in the first half of 1992, as overall demand continues to pick up. Rising margins mean that companies are generating more profits per unit of output. Operating earnings of nonfinancial businesses as a percentage of their output rose to 7% in the fourth quarter, and they have been edging higher since the fourth quarter of 1990 (chart).

Margins should continue to fatten in 1992. Last year, prices rose by about 3%, while the growth in unit labor costs slowed to only 2%. That gap allowed margins to rise. This year, inflation is likely to remain at about 3%, while unit labor costs should slow further.

That's because wages and benefits are unlikely to accelerate much, if any, from last year's 3% pace, and the usual speedup in productivity growth that accompanies recovery will result in further moderation in unit labor costs. This means that many businesses will be able to boost profits even in a climate where pricing power is weak. That's another reason for optimism.

To be sure, no one is out doing the mambo on either Wall Street or Main Street. But the recent spate of better-looking data suggests that the rhythm of the economy has a little more swing to it.



THE WEEK AHEAD

INSTALLMENT CREDIT

Tuesday, Apr. 7

Consumers probably added about \$500 million in new installment credit in February, according to economists surveyed by MMS International, a division of McGraw-Hill Inc. The gain would be the first increase in credit since October and is indicated by the jump in retail sales and a small rise in personal bank loans. Revolving credit and auto financing are likely to account for the bulk of the additional debt in February.

PRODUCER PRICE INDEX

Thursday, Apr. 9, 8:30 a.m.

Producer prices of finished goods likely increased by just 0.2% in March, the

same mild advance as in February, forecast the MMS economists. Excluding the volatile food and energy components, producer prices are likely to show a 0.3% advance in March, after a 0.1% rise in February. Even so, inflation remains on a steady downswing.

CAPITAL SPENDING PLANS

Thursday, Apr. 9, 8:30 a.m.

The Commerce Dept.'s second look at capital-spending budgets, done in January and February, probably will show that companies expect to increase spending on new plants and equipment by about 6% in 1992, a bit more than the 5.4% rise planned for this year in the October and November survey. Lower interest rates and greater signs of recovery

are prompting companies to invest in plants and equipment. In 1991, such outlays fell by about 0.5%.

CONSUMER PRICE INDEX

Friday, Apr. 10, 8:30 a.m.

Consumer prices likely rose by 0.3% in March, the same moderate increase as in February, according to the MMS survey. Excluding food and energy, the core rate of consumer inflation is expected also to have increased by 0.3% in March, but that would be a bit slower than the 0.4% advance in February. Apparel costs should fall back after rising sharply in February, but rising tobacco prices may offset some of that decline. Still, core inflation is set to grow below 4% this year—the slowest pace since 1986.

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APRIL 13, 1992

CHAOS ON THE HILL

SCANDAL AFTER SCANDAL, A LEADERSHIP VACUUM, AND KEY MEMBERS RUNNING FOR THE EXITS



As Speaker of the House, Thomas S. Foley is an enlightened reformer in a job often filled by petty tyrants. But the sad-eyed, soft-spoken congressman's reasonableness, affability, and taste for brutal confrontation have helped produce a crisis that now threatens his job—as well as what little remains of public respect for Congress.

After six months of scandal, from check-kiting at the House bank, to drug dealing and embezzlement at the House post office, and unpaid bills in the House restaurant, Capitol Hill is in turmoil. Some House Democrats are just heading for the hills of retirement. Others are urging their leadership to declare all-out war on the White House and such publican tormentors as House Minority Whip Newt Gingrich (R-Ga.). But as Congress straightens itself out, the country's business is on hold. "There is no precedent for this in history, where the frailties of the institution are on such a naked display," says Brookings Institution political scientist Thomas E. Mann. A veteran lobbyist adds that House members are "walking around in shell shock." The institution is breaking down.

TOO PASSIVE? The chaos on the Hill, and the prospect of a flood of new members come November, mean business leaders and lobbyists need to update their scorecards. Key players on the committees that handle business-oriented legislation—Ways & Means, Appropriations, Public Works, and Banking—are being pushed their way out the door (table). Executives will have to get used to new faces and, perhaps, new rules.

Many lawmakers blame Foley for the turmoil. They say he was too passive in handling early reports of abuse of banking privileges by House members. A big part of much of the grouching is Foley's wife, Heather, who as the Speaker's paid chief of staff doles out many of the perks and guards access to her husband. She recently testified before a federal grand jury investigating embezzlement and drug dealing in the House post office. The Foleys deny misconduct and have released a letter from the U.S. attorney's office stating that Heather was not a target of an investigation into possible obstruction of justice.

The House's scandals, meanwhile, are becoming ever more tawdry. After being asked on nationwide television why he didn't fire former House Sergeant at Arms Jack Russ, who oversaw the House bank and bounced numerous checks of his own, Foley was forced to deny rumors that Russ had "dirt" on him. And House officials now are probing allegations of illegal wiretapping of members' offices by the Capitol Police.

crisis on Capitol
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verthrow," says
ntative Timothy

y (D-Minn.), a rising star. "But
ership's future depends a lot on
ch reform we get between now
ember."

he near term, the leadership is
a three-pronged plan to get the
back on track. But members are
ying to maintain their balance as
und shifts beneath their feet.
erks as free prescriptions, cut-
mnasium fees, and low-cost gifts
ationary store are history. Other
odies—chauffeur-driven cars,
ut flowers, airport parking—
become casualties once House
complete a wide-ranging review.

PRO. Scurrying to contain the
ire, the House also is ringing
e curtain on its cherished patron-
stem. Thousands of House em-
—from elevator operators to the
per who oversees a \$10 million
and a small army of greeters,
ars, baggage handlers, and
are now supposed to come under
system. Foley and House Repub-
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**THE FOLEYS' FOLLIES:
SPEAKER TOM AND
WIFE HEATHER, HIS
STAFF CHIEF, MAY
LOSE THEIR JOBS**

agenda with five or six items, then work
together to carry it out.

But if Foley embraces some of the
more energetic reforms, he could ignite
a civil war with the barons of his own
party, particularly Ways & Means Chair-
man Dan Rostenkowski (D-Ill.), Energy
& Commerce Chairman John Dingell (D-
Mich.), and Appropriations Chairman
Jamie Whitten (D-Miss.). They have au-
thority over most of the legislation that
goes through the House, and their huge
staffs make their committees power cen-
ters that allow them openly to challenge
the Democratic leadership. "We need to
get to a lean and mean operation," says
Representative Dan Glickman (D-Kan.).
"The Speaker and Majority Leader have
to be willing to take on the committee
chairs."

For now, Foley and Majority Leader
Richard A. Gephardt (D-Mo.) are resist-
ing calls for an assault on the chair-
men's power. But that may change in
the new Congress. Because of redistrict-
ing, retirements, and the likely defeat of
some longtime incumbents, experts pre-
dict there could be 120 new faces on the
Hill next year. Many of the freshmen

overhaul of unemployment insurance,
and new campaign-finance rules.

BLAME-SHIFTING. That approach is un-
likely to get Congress back into voters'
good graces. If the institutional reforms
are too modest and arcane, they won't
convince the public that lawmakers have
given up on the lifestyle of the rich and
famous. Exposing the White House's
abuse of perks may make Democrats
feel better, but the outside world is like-
ly to view it as a feeble attempt to shift
the blame.

The focus on legislation may be the
most troublesome. The Democratic lead-
ership is suffering a shortage of follow-
ers. In recent days, Foley and other lead-
ers have been rebuffed in their efforts
to reprogram defense spending for do-
mestic needs and to override President
Bush's veto of a tax bill. Even if any of
the measures on the new wish-list actu-
ally make it through the House and the
Senate, they face almost certain vetoes.
"What's hurting us across the country is
the sense that nothing ever happens,"
groans Penny. "I don't mind getting
down to a serious agenda but not if it's
just to pick a partisan fight."

Foley's big test will
come in the November
elections. If the Demo-
crats lose more than 30
seats, the GOP could
team with Democratic
conservatives to form a
working majority.
Should that happen,
Democrats may decide
that they have had
enough of the avuncu-
lar style and elect a
leader with a taste for
the jugular.

*By Paula Dwyer, with
Richard S. Dunham, in
Washington*

BIG TURNOVER ON CAPITOL HILL

By Apr. 1, 45 House members and six senators were headed out, including:

REPRESENTATIVE CARL D. PURSELL (MICH.) The senior Republican on the
House Appropriations Committee, the panel that controls the nation's purse-
strings. Seven other Appropriations members are leaving

REPRESENTATIVE ED JENKINS (GA.) A moderate Democrat on the tax-writing
Ways & Means Committee. Five other panel members are headed out, too

REPRESENTATIVE ROBERT A. ROE (N.J.) The Democratic Chairman of the
House Public Works Committee, one of the Hill's biggest pork barrels. The pan-
el's senior Republican, 13-term John P. Hammerschmidt (Ark.), also is retiring

REPRESENTATIVE DOUG BARNARD (GA.) A prominent Democrat on the House
Banking Committee. The panel's leading Republican, Representative Chalmers P.
Wylie (Ohio), also may retire

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ILLUSTRATION BY JEFFREY EISELE, GAMMA LIAISON

Commentary/by Howard Gleckman

'JERRY'S TAX': WRONG ANSWER, RIGHT QUESTIONS

Former California Governor Jerry Brown's radical plan to replace the federal tax system with a 13% flat-rate individual income tax and a 13% value-added tax on business has grabbed public attention in recent weeks. And most economists who have studied his proposal don't like what they see.

Much of the criticism is justified. "Jerry's tax," as rival Presidential hopeful Bill Clinton terms it, would raise taxes on the poor and elderly, even as it lowered taxes for well-off families. Brown's plan is also simplistic, ignoring such key specifics as what income would be taxed and what expenses could be deducted. And unlike most proposals, Brown would tax labor twice by making businesses pay taxes on their payrolls, and then hitting workers again on the same wages. This would effectively double his claimed 13% rate on individuals.

POSTCARD 1040. But Brown, always the provocateur, deserves credit for raising critical issues in a campaign that at times has paid more attention to private lives than public policy. Does the current tax code encourage excessive consumption and debt? Can some of the tax code's hideous complexity be eliminated? By trumpeting his flat-tax idea and promising a system so simple that returns could be filed on a postcard, Brown has sparked the first tax-policy debate since the 1986 reform. The exercise should be more productive than the tiresome squabbling between the White House and congressional Democrats over "economic growth" packages. Says University of Michigan economist Joel B. Slemrod: "I'm much happier to see a serious debate about a flat tax. It raises important economic issues."

While Brown's plan is labeled a flat tax, that focuses on only half the plan. The second, more far-reaching element, is a value-added tax he would impose on business sales of goods and services. Taken together, Brown's flat-rate income tax and his VAT are intended to function as a consumption tax that replaces the current individual and corporate income levies, as well as the Social Security payroll tax.

The idea of taxing consumption

while exempting investment and savings is not new. Housing Secretary Jack F. Kemp raised it as a congressman in 1978. In the '80s, the approach was popular among academics. Two Stanford University economists, Robert Hall and Alvin Rabushka, developed a plan that formed the basis of Brown's scheme. Individuals would pay a flat 19% tax on wages and salaries with no deductions, but capital gains, interest, and dividends would be exempt. Businesses would pay the same

All these proposals would work about the same way (table). The idea would be simple, tax all income once, end the bias against equity, finance and personal savings, and allow business to write off capital investments immediately. For better or worse, a consumption tax to replace the current system would sharply curtail the government's ability to use the tax code to promote favored industries.

The biggest drawback, in terms of politics and social policy, is that consumption taxes tend to fall heavily on the poor. The problem is fixable, but only by adding complexity. Hall and Rabushka try to inject fairness by exempting the first \$16,000 of income from their tax. Bradford adds graduated rates to the mix. And Brown responded to critics by hastily adding a \$15,000 exemption to his scheme.

REPAIR JOB. For the most part, the goals of the flat-taxers are worthwhile. But many economists wonder whether the existing system needs to be junked. After all, double taxation of dividends can be ended by adjusting the current code. The income tax could also be changed to allow businesses to write off investment immediately and to encourage savings through incentives such as individual retirement accounts. And the consumption tax will not be immune to politics.

can be loaded up with special-interest junk just as easily as the income tax. Says Aaron: "A shift to a whole new tax system is not likely to yield simplification. It would be lovely if it did, but I don't think it's sustainable."

Brown feels his tax plan is a pristine replacement for today's corruption-riddled code. Other pols don't agree. For them, a consumption tax is a money machine to supplement the tapped-out income and payroll tax system. For instance, a 3.5% broad-based VAT would yield about \$100 billion a year. Washington's chronic need for funds has won the idea powerful friends, from those who want to cut corporate taxes to those who want to finance national health insurance. But properly crafted consumption taxes can have real merit. Washington must tackle some fiscal policy issues this year. Consumption taxes ought to be part of the debate.

A CONSUMPTION-BASED TAX: HOW IT SHOULD WORK

- No income is taxed twice
- Wages and salaries are taxed at a uniform rate. Can be made progressive using personal exemption
- Capital gains, interest, and dividends are not taxed
- A value-added tax is imposed on business profits, with no deductions for interest and dividends paid
- Business can write off capital investment immediately

DATA: JMW

rate on total receipts, less the cost of labor, equipment, and materials. No deduction would be allowed for either interest or dividend payments. A similar proposal, called the X-tax, was devised by David Bradford, now a member of President Bush's Council of Economic Advisers. And Brookings Institution economist Henry J. Aaron, along with his then-colleague Harvey Galper, designed a "cash-flow" tax that also zeroed in on consumption. In 1988, Senator Bill Bradley (D-N.J.) pushed a version of the Aaron-Galper plan.

'I'm much happier to see a serious debate about a flat tax. It raises important economic issues'



HUMAN SERVICES DEPT. DOUBLES AS A HOMELESS SHELTER

IN FOR THE POOR, PLAY FOR THE MIDDLE CLASS

budget-trimmers pander to angry voters by targeting welfare

After she pays her \$650 rent, Catherine Flatow can count in pennies the money left over from her monthly welfare check. Such simple pleasures as paper towels are luxuries she can't afford. The 33-year-old San Mateo (Calif.) mother of two says she has to work, but can't afford child care, and if life is a grind now, it's only going to get tougher. Republican Governor Pete Wilson has proposed cutting AFDC payments by up to 25%. Frets Flatow: "If they cut me, I'll be out on the street."

For the thousands of welfare recipients in the U.S., the government's help-and-hands is turning thumbs down. Both federal and state-funded general assistance programs have become budget-trimming targets. The latest slashes come from California, which on Apr. 1 severed 90,000 recipients already reduced relief rolls of 1990. Beyond those reductions are nationwide cutbacks in AFDC funding: In the past year, some 40 states lowered or froze AFDC payments to single mothers and children, according to the Washington-based Center on Budget & Policy Priorities.

Nation's governors say the reductions are the unhappy result of a lingering recession. But with AFDC accounting for just 3.5% of state expenditures, and

general assistance funding representing even less, budget deficits are only part of the reason lawmakers are so willing to cut welfare, social policy experts suggest. What's at work, they say, is the politics of welfare: Politicians are playing on the fears and resentment of middle-class voters worried about their jobs as they see other ones go. "The recession makes people less patient with spending on the poor," says Lawrence M. Mead, associate professor of politics at New York University and author of *The New Politics of Poverty*.

OPEN SEASON. The rhetoric can only heat up as the nation speeds toward the November elections. Last month, in a speech to the Economic Club of New York, Vice-President Dan Quayle blamed the city's high taxes and school dropout rate on the failed "liberal vision" of a "content welfare state." In 1991's governors' races, attacks on welfare helped Republican David Duke win a white majority in Louisiana and helped elect Republican Kirk Fordice in Mississippi. "The welfare mother has replaced Willie Horton as the code word in racial politics," says Mimi Abramovitz, professor of social policy at Hunter College.

Whatever the motive, the cuts could hardly come at a worse time. The recession is driving AFDC and food-stamps

caseloads to all-time highs. Even applications for Social Security disability benefits have soared 43% since 1989 as cash-strapped individuals scramble for available funds.

On a state-by-state basis, the picture is even worse. In Ohio, after the governor and legislature began cutting general assistance rather than raise taxes or pare funds for education, shelters overflowed. One program, which gives the homeless shelter in office buildings and warehouses when regular centers are full, reports that it now serves 255 people a night, up from 160 last year. In neighboring Michigan, which ended general assistance altogether to 83,000 recipients in October, homelessness is rising. "At this point, I feel helpless," says Donnie A. Ferrill, 36, an ex-carpenter who has lived in a homeless shelter or a tent since Michigan stopped his benefits.

Many states hope to change welfare recipients' behavior by getting stingier. Mississippi, which already has the lowest AFDC payments in the country, is considering dropping recipients who fail random drug tests. California, Virginia, and Maine want to refuse to pay extra for additional kids. Maryland proposes requiring parents to provide youngsters with preventive medical care. And Connecticut may penalize parents if their children skip school or are not immunized. Behind these schemes is "a gnawing feeling among people that welfare isn't working and we've got to do something to turn the system around," says Michael B. Levin, vice-president of the Connecticut Policy & Economic Council.

A backlash against reform has al-

CUTTING THE DOLE

Here are some of the ways states are slashing the welfare rolls:

State	Change
CALIFORNIA	Proposes cuts of up to 25% in AFDC Teen recipients must live with parents and attend school regularly
CONNECTICUT	Proposes limiting general assistance payments to those who have recently worked Freezing AFDC payments Requiring recipients to immunize children, attend school regularly
MARYLAND	Reduced AFDC payments to 1989 levels
MASSACHUSETTS	Cut general assistance rolls by 38%
MICHIGAN	Terminated general assistance
OHIO	Cut general assistance benefit to \$100 per month Limited participation to 6 months per year, effectively cutting 90,000 from the rolls

DATA: BW, CENTER ON BUDGET & POLICY PRIORITIES

ready begun. Starting July 1, New Jersey plans to cut off AFDC payments of an additional \$64 a month for every new child born to a family. That has spawned an unusual coalition to fight the rule—from advocates for women to the Catholic Conference, which fears a rise in abortion. "What the state is now saying is: 'If you're an unfortunate kid who's born while you're mother is on welfare, that's too bad,'" says Lisa Glick Zucker, acting legal director of the American Civil Liberties Union in New Jersey. The state sees the issue differently: "Middle-class families can't demand a pay increase because a new baby is coming," says Democratic Governor James J. Florio. "Our new law allows welfare recipients to live under those same values."

FUTILE SEARCH. But critics of the reforms believe that some of the punitive measures are based on myths about the poor—that welfare encourages child-bearing or that ending benefits will force recipients to work. Studies show that the average AFDC family has fewer than two kids—below the national average—and that birth rates to unmarried mothers are no higher in generous states than in stingy ones. Moreover, in Michigan, a state study found that only a handful of the 83,000 cut from the rolls found jobs because they lacked skills. And preliminary studies from a program in Wisconsin that penalizes parents whose kids are truant indicate that the threat of sanctions hasn't improved school attendance.

Studies also show that it takes substantial investment to make even marginal improvements in a welfare mom's job prospects. So it's no wonder that even the federal government's large-scale effort to reform welfare, the 1988 Family Support Act, has proved disappointing. In fiscal 1991, Congress provided \$1 billion in matching grants for state job programs aimed at welfare recipients. But many states haven't been able to come up with their share, so only 53% of the federal funds has been used. "Any governor who is not spending this money can't be sincere when he says he wants people to work," says Sheldon H. Danziger, a University of Michigan social work professor. "They just want to cut their budgets."

With the most promising programs failing to produce much success, the smaller punitive measures aren't likely to do more than assuage middle-class resentment. But to many recipients, welfare often means the difference between a modicum of security and life on the streets.

By Susan B. Garland in Washington, with Joseph Weber in Philadelphia, Zachary Schiller in Cleveland, and bureau reports

THE ECONOMY

THE WORLD'S BIGGEST CREDIT HOG: WASHINGTON

The federal budget deficit will keep sending interest rates up

So you're kicking yourself for missing the low point in interest rates in January, when you could have refinanced your 30-year mortgage at 8%? Wall Street says relax, that the two-month rise in long-term interest rates is temporary. But some economists say you have reason for regret. They figure inflation-adjusted interest rates will remain high for years.

These purveyors of gloom are focusing on the one topic no one wants to talk about in this year of recession and election—the federal budget deficit. At \$400 billion now, even economic recovery won't push the tide of red ink back very far, analysts say. Indeed, the Bush Administration itself foresees a \$182 billion deficit in 1997.

So as private investment picks up with a recovering economy, government will be hogging the supply of credit (charts). And overseas investors won't provide new capital. "The only way the market can clear is with higher rates," says Irwin L. Kellner, chief economist at Chemical Banking Corp.

UNNERVED. That's got the Federal Reserve worrying that high rates will squash an economic rebound. Fed Chairman Alan Greenspan has stepped up his criticism of Washington's tax-cutting fever, which Fed officials say spooked bond investors. Vice-Chairman David W. Mullins Jr. says the surge since January in 30-year T-bonds, from 7.45% to more than 8%, was caused by fears of tighter credit through 1997—the period when the deficit will crowd out investment. "The markets are signaling big increases in rates as the deficit and the recovery collide," Mullins says.

Crowding out has been an economic bogeyman since the mid-1970s, when the

budget slipped permanently into the red. In the early 1980s, economists thought the government's demand for money would strangle the economy. But foreign money, attracted by high rates, saved the day.

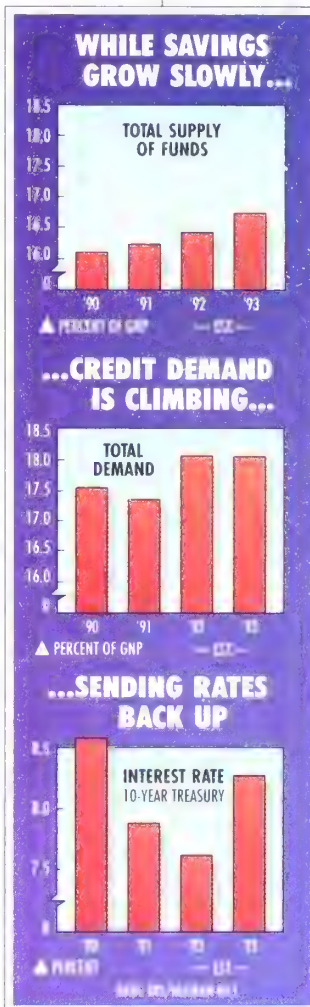
That's not going to happen this time. Today, long-term rates are high relative to inflation all around the globe, and international spreads have narrowed. U.S. and British elections, and governments in France and Italy, and Japan's recession "add a big premium to rates," says David H. Resler, an economist for Nomura Securities International.

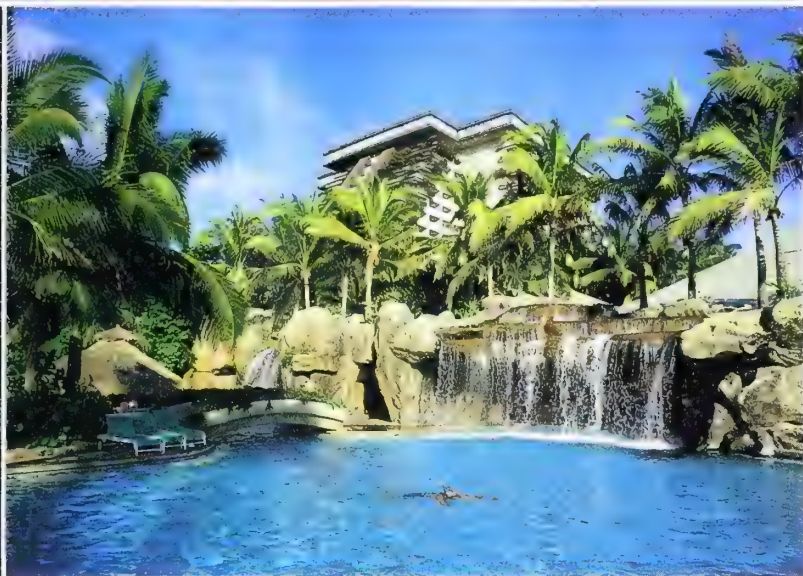
SAYONARA TIME. Farther out, European money will go to the former Soviet bloc. And the 1980s' biggest buyers of U.S. bonds, the Japanese, reversed ground and liquidated \$19 billion in Treasuries in 1990 and 1991. "They need the money to shore up their own finances," says Steven Nagourney of Lehman Brothers (page 50).

So the U.S. must find its own way to ease the coming capital crunch. Fed Governor Wayne Angell says lower inflation and high real rates will boost saving. Deleveraging—slashing debt and boosting equity—will do the same for business, says First Boston Corp. economist La J. Pedersen, who predicts that the U.S. will soon be exporting money.

But "we can't dig out of a decade of debt in a hurry—and on the federal level, we're not even trying," observes David A. Wyss, financial economist for DRI/McGraw-Hill. Instead, most politicians seem interested only in economic growth. But without tough action on the deficit, high long-term rates may keep the pols' wish from coming true.

By Mike McNamee in Washington





ND'S PRINCESS HOTEL CHAIN, NEWSPAPERS, AND SOUTH AFRICAN MINES COULD ALL GO ON THE BLOCK

TINY' ROWLAND'S LOSSAL WOES

by recession, he appears to be dismantling his conglomerate

ever mind the moralizing. If there's a deal to be done, chances are Roland W. "Tiny" Rowland will hop in his Gulfstream jet to the heart of the action. Over the past 10 years, the chief executive of Lonrho, the London-based industrial conglomerate, secretly took a few jaunts to Libya. In late March, just days before the U.N. voted to impose sanctions on the government of Colonel Muammar Gaddafi, came the payoff: Debt-laden and recession-battered Lonrho announced it was selling a one-third stake in the Metropole hotel chain to Libya's state-investment arm for \$310 million. The venture boldly underlines a new strategy for Lonrho, the British holding company whose assets—including natural resources, newspapers, tea and sugar plantations, and car dealerships—generated 1991 revenues of \$8.4 billion. Rowland, once the grand acquirer, now appears to be dismantling his company. The Metropole deal means that Lonrho has raised \$608 million through asset sales since the Sept. 30 close of the company's 1991 fiscal year.

THE DARK. More deals are in the air. Company executives won't rule out selling Lonrho assets, from its famous Sunday paper, *The Observer*, to its promising uranium and rhodium mines in South Africa—even though South Africa may be on the verge of a business boom. The Libyan deal stunned even those

bankers and investors who are pressing Rowland to unload assets. Lonrho shares have sunk 31% since the deal was announced, and 60% from their peak this year (chart). But the dealing will go on. Banks want a sharp cut in Lonrho's debt, now about 60% of total capital. Comments one banker: "We're no longer willing to give Rowland the benefit of the doubt. He needs to lay out a coherent strategy to get over this crisis of confidence."

The fallout shows little sign of abating. On Mar. 31, Lonrho lost its London stockbroker. UBS Phillips & Drew resigned the Lonrho account, say sources in the City, because the company kept it in the dark about many financial matters, including the Libyan deal. And the U.S. Treasury is investigating the stock sale to determine whether the deal makes Metropole a Libyan-controlled company subject to U.S. sanctions. If so, by midyear, Americans could be forbidden to do any business with Metropole—or even to stay at its hotels.

The consequences could be much worse if the Treasury decides that Libyan control extends to Lonrho: The Administration could freeze its U.S. assets, including Hondo Oil &

Gas Co., and block American shareholders from selling their Lonrho stock... That could cause problems for Boston-based Fidelity Investments, which could be stuck with 10% of Lonrho's shares if it doesn't sell before the freeze.

Lonrho Deputy Chairman Paul G. B. Spicer defiantly predicts that the storm will blow over. "Some say we should have been more careful about who we are dealing with, but we've got to think about getting the best deal for our shareholders," he says. "We've done nothing illegal." And Row-

land himself, says one old friend, remains serene. "He has an amazing way of rationalizing the difficulties," says the friend.

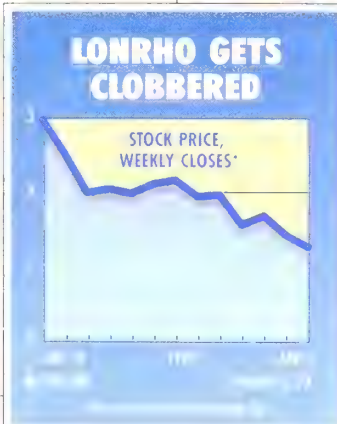
BRAVE SOULS. Rowland has had a harder time rationalizing the recessions in the U.S. and Europe, which have battered cash-spinning businesses such as Lonrho's auto dealers. Meanwhile, the African operations are buckling under the weight of economic crises and weak commodity prices. Pretax profits slid 24% last year, and Jack Jones, a UBS Phillips & Drew analyst, forecasts an additional 40% deterioration this year, on a 6% dip in revenues, to \$7.9 billion.

Spicer nonetheless insists that Lonrho can smoothly sell assets and transform itself once again into a major natural-resources play. But an earnings turnaround would require a worldwide rebound in mineral and commodity prices.

To a few brave souls, Lonrho's woes are a great opportunity. Analyst Robert Davies of Lehman Brothers International, who met recently with Rowland, says: "I'm convinced the company isn't going bust, so the stock is desperately cheap." And Geoffrey Rosenberger, managing director of Clover Capital Management Inc. in Syracuse, N.Y.,

says he bought 7 million shares in the past month. He's uncomfortable, he says, "but I only make money on stocks when my stomach turns over." If he sticks with Tiny, he'll be popping antacids by the fistful.

By Richard Melcher in London, with Geoffrey Smith in Boston and Mike McNamee in Washington



IF CEO PAY MAKES YOU SICK, DON'T LOOK AT THE STOCK OPTIONS

Executives are reaping unprecedented option grants

Memo to Phil Donahue:

Dear Phil: You've broached every topic from tough love to transvestite teens. Why not executive stock options? Companies are handing them out by the hundreds of thousands—and even you, Phil, and your rival Sally Jessy Raphael are on the gravy train. What about it?

It's true. Like many of the nation's top chief executives, even Phil Donahue's compensation includes that most luscious executive perk: the stock option. Multimedia Inc., the syndicator of talk shows, has handed Donahue more than 1 million options—150,000 in 1991 alone—that show a paper gain of \$20.5 million.

It's enough to warrant one of those wild, audience-participation free-for-alls for which Donahue has become famous.

Phil certainly wouldn't have a shortage of executive guests to book for such a show: This year, amid a storm of controversy over pay for the top brass, many of the nation's largest corporations are lading out record stock options to their chief executive officers.

HUGE GRANTS. Some of them are mind-boggling. Atop the heap so far is Leon C. Hirsch, chairman of U.S. Surgical Corp., who was handed options on 2.75 million shares in 1991—a tidy package already worth nearly \$120 million. AT&T, Equimark, Merrill Lynch, Paramount, Philip Morris, and Westinghouse have joined the rush, each dishing out 300,000 shares or more to their chieftains.

Stock options are nothing new. Since the 1950s,

companies have been giving their senior managers options to buy stock at a set price. Executives can exercise those options up to 10 years later, when the stock may be trading well above the option level. They were designed to provide managers with a strong incentive to perform well over the long haul. With few exceptions, however, the grants were small.

What's different today is the size and use of these rewards. Instead of handing retiring Chairman Hamish Maxwell a gold lighter, for example, Philip Morris Cos. last year handed him options on 500,000 shares—a good-bye gift already worth \$10.4 million. "Even Tiffany's best doesn't cost a fraction of what Maxwell is likely to get," says pay critic Graef S. Crystal.

Maxwell is not alone. Merrill Lynch & Co. last year tossed a 300,000-share option grant to Chairman William A. Schreyer, even though he retires next year. Schreyer's prize shows a paper gain of \$10.1 million, largely because of a rally in brokerage firm shares. "As the CEO, he's making strategic decisions that have long-term implications," explains Herbert M. Allison Jr., Merrill's chief financial officer. "It's fully appropriate to give him a long-term grant of options."

Some shareholder advocates consider

huge option grants "outrageous" because they can unleash millions in rewards even if the stock merely matches the return of a risk-free Treasury bill. "With these big grants, chances are CEO can put his feet on the handlebar and coast his way to extraordinary wealth," complains United Shareholder Assn. President Ray V. Whitworth.

What's behind the sudden largesse? Several pay consultants believe it's a hangover from the leveraged-buyout craze of the 1980s. In most LBOs, 10% to 15% of a company's outstanding stock options were set aside for the management team. That compares with less

than 3% in most public corporations. Peter T. Chingo, a consultant with KPMG Peat Marwick, says some of the larger option awards may be part of an effort to match the rewards given to managers involved in LBOs.

DEFENSIVE. In many cases the outsize awards are going to chief executives whose companies have performed well—including Philip Morris and Merrill Lynch, where spokesmen defend the grants by citing the company's recent performance. That's also true of U.S. Surgical, the Norwalk (Conn.) medical product

firm. The company's market value has jumped to \$5.8 billion last year from only \$400 million in 1988. Hirsch has said that his performance justifies his 2.75 million option grant—the second largest. The biggest, 4 million, went to H. Heinz Co.'s Anthony F. J. O'Reilly in 1990.

Still, Hirsch went on the defensive even writing a column about it in *U.S. News & World Report*. "If I don't make the grade, I don't get the bonus, and my stock options don't appreciate," wrote

Hirsch, who would not discuss the issue with *BUSINESS WEEK*. What he did not note was that in the previous three years he had received options on 1.6 million shares—now worth \$225 million. For every \$1 rise in Surgical's stock price, Hirsch stands to gain \$50 million, thanks to four years of options.

Sometimes, executives take cuts in cash pay, only to receive sizable option grants worth far in excess of a single-year salary cut. At Westinghouse,

LEON C. HIRSCH
U.S. SURGICAL



Option grants
2,750,000
Current value*
\$118.6 million

STANLEY JAFFE
PARAMOUNT



Option grants
700,000
Current value*
\$2.2 million

HAMISH MAXWELL
PHILIP MORRIS



Option grants
500,000
Current value*
\$10.4 million

WILLIAM SCHREYER
MERRILL LYNCH



Option grants
300,000
Current value*
\$10.1 million

PHILLIP ROONEY
WHEELABRATOR



Option grants
800,000
Current value*
\$10.9 million

e Corp., Chief Executive Paul E. Allen, saw his pay and bonus last year rise to \$1.5 million. But the company decided to grant him the option to buy 250,000 shares at \$22.28 each. Because the company's stock now trades at \$19, the option is worthless. Allen can move Westinghouse's stock price up, however, he stands to gain nothing.

In other cases, companies are upping the ante partly to keep up with the Joneses. American Telephone & Telegraph Chairman Robert E. Allen last year was granted options on 312,526 shares, up from only 44,898 a year earlier. The greatest part of the award was a one-time grant of 250,000 options that an AT&T spokesman says was made in part to keep Allen's compensation package

competitive. In Allen's case, however, most of the options are priced at a premium to market.

Many consultants agree that this latest round of mammoth grants is likely to push spiraling executive pay even higher, as smaller companies follow the lead of corporate giants. Just the stuff for a wild debate on *Donahue*.

By John A. Byrne in New York

WORKPLACE



BURNING IN ATLANTA: CWA WORKERS SAY AT&T IS LOCKING UNION MEMBERS OUT OF THE GROWING PARTS OF THE COMPANY

first day of bargaining, when some 30 members were arrested for occupying NCR's Dayton headquarters. That same day, the CWA held rallies in 11 cities, including outside an AT&T building in Atlanta. "We told Allen that he has to make up his mind whether his policy toward unions is what he says it is or what NCR says it is," says CWA President Morton Bahr. "He can't have it both ways."

The unions' ire stems from the huge number of jobs they have lost since 1984 (chart, page 38). To compensate, AT&T agreed to extensive layoff protections

WHAT'S THE RIGHT CHOICE FOR AT&T?

to please either the Communications Workers or NCR

When American Telephone & Telegraph Co. sat down to negotiate a new labor contract on March 30, its two unions weren't in a good mood. They've grown angry as AT&T shrinks the largely unionized work force in its core phone business. Meanwhile, the company grew rapidly via nonunion new ventures and acquisitions, such as its Universal credit card unit and NCR Corp. Tensions mounted at AT&T, which traditionally has cooperated with unions, said on March 4 that it would eliminate a third of its 18,000 operators.

Allen put AT&T Chairman Robert E. Allen in the hot seat. The unions are threatening strikes or customer boycotts. Allen doesn't rein in his new units, which aren't covered by the pact that expired May 30. But Allen's management plan is built on independent opera-

tions setting their own strategies. The flash point: computer maker NCR, which AT&T bought last year largely for its managerial talent. NCR, which recently defeated two organizing drives by the Communications Workers of America, AT&T's largest union, says it will continue to fight such moves.

That's why Allen may be forced to choose between undermining his own strategy or increasing labor strife. The CWA delivered a warning shot on the

and to one of the best job-transfer systems in the country. That has helped maintain AT&T's long tradition of labor-management cooperation even as new subsidiaries swelled its nonunion payroll.

NARROW DEFEAT. But now CWA leaders believe AT&T is deliberately trying to keep them out of the growing parts of the company. The job-transfer system gives laid-off employees a shot at jobs that open in AT&T's core businesses but not those in the new units. So the unions' only recourse is to mount organizing drives. AT&T has pledged neutrality in such efforts that occur in its core businesses. But Allen has allowed managers of the new units to pursue aggressive antiunion tactics.

For instance, Paradyne Corp., a modem maker AT&T acquired three years ago, actively opposed a CWA organizing attempt last year. NCR has been equally combative. It was 60% organized in the 1960s but has cut unions to about 5% of its 27,000 U.S. workers today. In two recent CWA elections in Dayton and Indianapolis, NCR hired an antiunion law firm, held one-on-one meetings with employees, and stressed that the union is an unnecessary third party.

The result: NCR workers narrowly de-

AT&T vows to stay neutral, but NCR management has already mounted two successful antiunion drives

IN A CATEGORY OBSOLETE AND LIGHTER, COMPAQ VENTURES ANOTHER AD.

Make it smaller. Make it lighter. Make it lighter. Make it smaller.

These must be the mandates emblazoned upon every R&D document handed to the engineers of today's crop of notebook computers.

Admirable goals to be sure. Goals that the engineers at Compaq, however, believe fall well short of making the most of portable computing.



Accurate to within minutes, the COMPAQ PowerSmart Pack battery gauge clearly displays remaining battery life at the touch of a button.

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To make the most of the smarter battery, the new COMPAQ LTE Lite also comes with user-adjustable power-drain settings, and three dif-



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better known as "where did
\$**# cursor go?"

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mpaq, we realize that data
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To back them with a one-year
worldwide warranty and our toll-
free Compaq Customer Support

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be more like it.

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between a small
notebook and a smart
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Actual weight: 6 lbs. Actual dimensions: 8.5"x11"x1.75". Actually, this is the best notebook we've ever built.

feated the union both times. NCR workers who led the drive say some of them were intimidated by management's tactics, and the union has filed unfair labor practice charges against the company. "Their wish is for us to respond to union drives the way AT&T has," says William W. Holloway, NCR's vice-president for personnel. "But we don't have that same historical position of neutrality."

Allen and Bahr have been wrestling with the issue since last fall, when they agreed to set up a joint committee to hammer out rules AT&T would follow in organizing drives. The committee, which included Charles L. Brumfield, vice-president for labor relations for AT&T's operations unit, agreed on a two-page policy statement in early March that would have blocked a

number of NCR's antiunion tactics. But the talks ended when Allen told Bahr that the discussions excluded NCR.

KEEPING NEUTRAL. That left the CWA angrier than ever. Union leaders say that NCR was their primary concern all along, mostly because its 12,000 blue-collar employees dwarf the 3,300 or so unorganized workers at AT&T's other three new units. So when Allen removed NCR from the table, workers refused to sign the statement. Even AT&T concedes some confusion. "The CWA's assumption may have been that the draft would apply to NCR," says William Ketchum, AT&T's vice-president for labor relations and Brumfield's boss.

Because the committee's effort failed, neutrality now will become a hot topic in the negotiations. For the unions, more than AT&T's labor relations are at stake. The CWA last year won a similar neutrality pledge from Nynex Corp. Next August, the union's contracts expire at the other Baby Bells, some of which also have been expanding nonunion operations. If the CWA lets AT&T off the hook, those companies may refuse to follow Nynex's lead.

Allen may try to assuage the unions by matching the relatively generous pay hikes Nynex granted last fall, which total more than 13% over three years. But that could be expensive. If it doesn't work, he'll have to decide whether it's worse to anger the unions or NCR managers. Allen declined to be interviewed for this story. But don't bet on him tilting toward the unions.

By Aaron Bernstein in New York

TWO-WAY TV ISN'T QUITE READY FOR PRIME TIME

Interest is high, but technical and programming hurdles remain

Americans may be angry at their politicians, but that doesn't mean they're voting. Sometimes, it seems, the citizenry is so busy watching television, it can't find the time to trek to the polls. To deal with the problem, some futurists are floating a novel idea: If voters won't budge from their sofas, why not bring democracy to them through their TV sets?

Call it teledemocracy. Such schemes would harness cable TV and telecommunications technology to help voters interact with public officials through television (box). Sound fanciful? Maybe. But much of the technology exists. Indeed, some entrepreneurs already are marketing interactive services.

Take Montreal. There, 167,000 subscribers of Canada's No. 2 cable operator, Le Groupe Vidéotron, can use a re-

mote control to select four different camera angles on a hockey game. Hewlett-Packard Co. recently announced a joint venture to manufacture up to a million remote controls for TV Answer Inc., a Reston (Va.) company that is developing an interactive TV system. The system lets viewers do everything from responding to polls to ordering pizzas—by pressing buttons on a video game-like controller. The control device then transmits signals over the airwaves. And this month, Tele-Communications, the nation's No. 1 cable operator, and AT&T will team with U.S. West to test equipment that allows viewers to order movies with a remote control.

If you've ever ordered a pay-per-view movie from your local cable company, you've already sampled a rudimentary form of interactive TV. What makes

ELECTRONIC TOWN MEETINGS: REACH OUT AND VOTE FOR SOMETHING

Few people have ever heard of an electronic town meeting, let alone been to one. That doesn't bother Texas tycoon H. Ross Perot, who has made the concept a key point in his potential bid for the Presidency. The way Perot sees it, elected officials should appear regularly on TV to explain issues in plain English. After listening to all sides, citizens would register their opinions by telephone or remote-control devices. He figures that would make government more accountable. Congress, Perot has said, would look like a ballet troupe, pirouetting around the stage and getting things done.

The concept might be radical, but Perot isn't the first to endorse it. "Thank God someone like Perot has come along and legitimized the idea," says Theodore Becker, an Auburn University political science professor who has

conducted experiments in what he calls "teledemocracy" for 15 years. "Now, suddenly, I don't seem so crazy," he says. **'DEVASTATING.'** The notion of a wide network for participatory democracy goes back to 1955, when psychologist Erich Fromm wrote in *The Sane Society* of "a true House of Commons," where citizens would vote on issues with the help of the technical devices we

use today. In 1982, Alvin Toffler wrote about such a system, "strike a devastating blow at the special interest groups and babies who infest the corridors of our parliaments."

Some towns already hold electronic meetings as a regular government. Reading, Pa., conducts city council meetings and monthly issues forums on Berks Community Television, a cable station.

ADVENTURES IN TELEDEMOCRACY

PENNSYLVANIA

Since 1976, Reading has debated issues on weekly cable television call-in programs

ALASKA

Residents have gathered regularly since 1977 in 86 locales to talk to reps via speakerphones

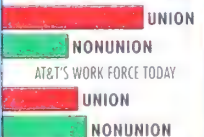
CALIFORNIA

Since 1989, Santa Monica has debated issues, using computers in homes and libraries

DATA: BW

UNIONS SHRINK AT AT&T

COMPOSITION OF AT&T'S WORK FORCE AS OF ITS JAN. 1 1984 BREAKUP



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HOW TO TALK BACK TO YOUR TV

The pros and cons of three interactive technologies



TELEPHONE

PROS: Easy to use. Convenient for ordering movies and other services

CONS: Can't modify program content or picture while it's airing. Limited phone-line capacity makes it hard to handle mass responses



AIRWAVES

PROS: Remote-control devices offer more direct interaction than phone lines. Also has more capacity than phones

CONS: Lack of cooperation with cable operators means viewers still can't modify program content of picture



CABLE

PROS: Offers the most direct interaction, enabling viewers to tinker with the action on the screen as it happens

CONS: Limits on channel capacity mean most of these services won't be up and running for a few years

DATA: BW

new services different is they provide flexibility in viewers watch—or even ability to tinker with what's on screen. Hewlett-Packard predicts this will win over consumers.

Others are more guarded. "It's something that's going to happen overnight," says Arlen. Tauber, a senior vice president at McCann-Erickson Worldwide Inc. For one thing, interactive services demand a huge number of channels. Cable-Communications Inc.'s on-demand service provides dozens of channels to watch each of its movies at staggered times.

PROBLEM. The trouble is, cable channels are already clogged. Cable has had trouble getting operators to set aside just a few channels for its pay-per-view telecasts of the Barcelona Olympic Games. As a result, many of the services will not be available until at least two years until digital compression can expand the number of available channels.

Interactive entrepreneurs are also trying to make the systems easy to

use. Right now, viewers can respond to their TV sets in three ways: through a cable wire, over the airwaves, or by using the telephone. The cable wire is the most flexible: Viewers can actually fiddle with the TV picture. Ventures using the airwaves or telephones allow viewers to respond to what's on the screen

education to drugs to day watching, residents can question officials over the telephone or vote on camera from a BCTV or video studio. Because of interactive programming, "people are more sophisticated about what they can and can't do," says Ann

CTV's executive director, state representative. Massive telephone campaigns for the public to voice their opinion or offer ideas. And in San Jose, Calif., residents debated and talk to town leaders. Personal computers stimulate and libraries. Perot's rivals are all part of an offshoot of the campaign. On Mar. 1, Brown held a live, 40-minute question-and-answer session, the PC information session by General Electric. 180 computer owners participated. Now, Computing to organize an on-line campaign. Brown and Bill Clinton. About 1% of Americans participate in networks.

the ideal system for the interactive cable TV, which allows citizens watch and take part in programs from their living rooms. The press is floating a new health

care plan or deciding whether to raise taxes, the proposals could be aired on a "democracy channel," where viewers could vote via remote control. In the early 1980s, when Warner Amex Satellite Entertainment Co. tested such a system for political meetings in Columbus, Ohio, it found that 10 times more citizens par-

nals, some 315,000 people got through. Of them, 70% said Bush doesn't understand the middle class. Within a few minutes, the poll results were flashed on the TV screen.

Proponents of teledemocracy see it as a way to build consensus, find common ground, and energize the electorate. "As a society, we have some tough choices to make, and we need the public as a partner to make it work," says Duane Elgin, head of a group called Choosing Our Future that conducts such meetings in San Francisco. He and Becker, the political scientist, have formed the Consortium on American Electronic Town Meetings, which has provided information about electronic meetings to Perot's staff. "We're not lacking in communications technology," says Elgin. "We're lacking the social will to make it happen."

But the very thought of instant politics and direct democracy raises questions: Would votes on issues be binding or just advisory? Who would decide what issues get voted on? Wouldn't it be harder than ever for Congress to stand up for what's right, rather than what's popular? And what if these electronic meetings were held opposite Seinfeld?

By Mark Lewyn in Washington



ticipated than attended town meetings.

Until such systems are widespread, Perot says, his Administration would have the citizenry register opinions over the phone though 800 numbers. CBS News actually gave that idea a whirl after President Bush's January State of the Union address. While CBS says 25 million calls were blocked by busy sig-

But the very thought of instant politics and direct democracy raises questions: Would votes on issues be binding or just advisory? Who would decide what issues get voted on? Wouldn't it be harder than ever for Congress to stand up for what's right, rather than what's popular? And what if these electronic meetings were held opposite Seinfeld?

By Evan I. Schwartz in New York

IT'S NOT JUST FANS ON THE EDGE OF THEIR SEATS

Advertisers and CBS are reaping a bonanza from NCAA basketball fever

March Madness never seemed quite so delirious as in the final overtime moments of the NCAA regional final between Duke and Kentucky. Trailing by one point with 2.1 seconds on the clock, Christian Laettner of Duke caught a 78-foot inbound pass, faked right, turned left, and lofted a shot at the buzzer. Final score: Duke 104, Kentucky 103. "It's almost as if the writer for *The Young and the Restless* wrote the script for the game," says Paul Schulman, a prominent media buyer and confirmed March Madman.

Schulman should thank Laettner for the happy ending: He and other media experts say Duke's thrilling victory on Mar. 28 could boost TV viewership of the final three games of the National Collegiate Athletic Assn. tournament by more than 920,000 households. That's good news for Schulman's clients, Eveready Battery Co. and ITT Corp., which have bought commercial time during the semifinal games. CBS is set to air the semifinals on Apr. 4 and the NCAA Championship game on Monday, Apr. 6.

Advertisers aren't the only folks cheering on the Blue Devils. CBS Inc. won an 11.9 Nielsen rating for the game, or 10.9 million TV households. That's a 27% jump over the equivalent game last year. Overall, the network's NCAA ratings are up 5% over 1991. CBS predicts the championship will attract more than 19 million TV households. More important, CBS already has sold out commercial time in the Final Four games, even though it's asking for more than \$450,000 per 30-second spot in the championship. "When you look at the strength of major sporting events, this comes between the Super Bowl and the [baseball] All-Star game," says Neil H. Pilson, president of CBS Sports.

JUGGERNAUT. College basketball has gathered steam since 1984, when the NCAA expanded the tournament field to 64 teams from all regions of the country. But it really became a juggernaut after a string of heart-stopping championships: Villanova's 1985 upset of Georgetown, Indiana's last-second victory over Syracuse in 1987, and Michigan's 1989 squeaker over Seton Hall. "We just kept having one great game after another through the 1980s," says Dave Gavitt, Boston Celtics chief executive officer

and former chairman of the NCAA's tournament committee.

Marketers are willing to pay princely sums to be part of such excitement: Measured by its cost per thousand viewers, commercial time on the NCAA final is as expensive as on the Super Bowl telecast. Commercial time in the semifinal games goes for about \$250,000 for 30 seconds, which is why CBS sold out those games well

before the final. But all told, the network is turning a profit on college basketball, even after paying the NCAA \$1 billion in 1990 for rights to telecast the men's tournament for seven years.

That's no small consolation for CBS, which lost \$400 million in 1991, mostly because of the sky-high rights fees it paid for Major League Baseball and National Football League games. Even better, the NCAA success comes on the heels of better-than-expected results for the Olympic Winter Games. While it struggled to sell all its commercial time, CBS says it broke even.

Happily for CBS, advertisers have come to regard the NCAA tournament as a three-week marketing opportunity rivaled only by the Olympics. Pepsi-Cola Co., for example, is buying 15 commercials in the Final Four games. Andrew Giangola, a Pepsi spokesman, says the company is spending three times as much this year as it did in 1991. The money is going for a series of spots to reinvigorate the highly successful

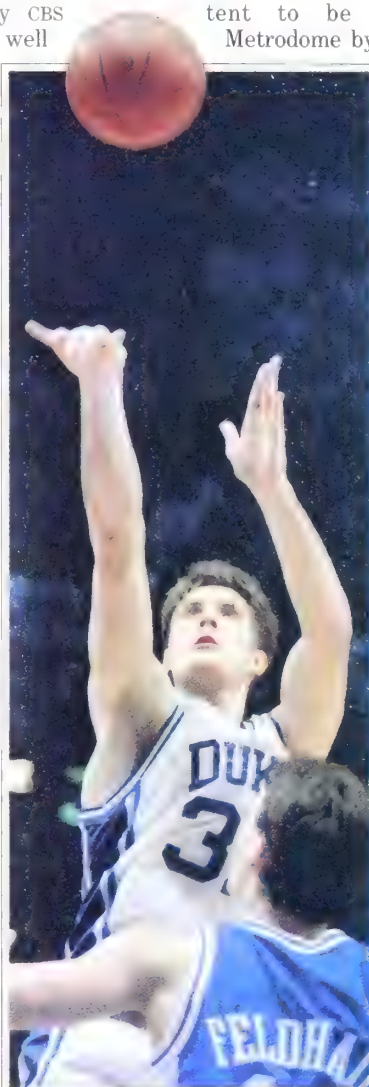
Diet Pepsi campaign that features R. Charles singing "You've Got the Right One Baby, Uh-huh." Pepsi is also erecting a 16,000-square-foot tent outside the Minneapolis Metrodome, site of the Final Four, to promote Diet Pepsi.

Nike Inc. will air eight commercials during the Final Four to push a new corporate-image campaign using the song *Instant Karma* by John Lennon. "We think the tournament is as important as the World Series and NBA Championship, if not more," says Nike Divisional Ad Manager Rob De Florio. Nike's archival, Reebok International is spending \$5 million to buy 10 spots during the Final Four—a 40% increase over last year. And the company will give away 14,000 free hats at Hoop City, a giant tent to be erected outside the Metrodome by Coca-Cola Co.

Reebok, Nike, and Diet Pepsi all value the tournament for its upscale, mostly college-educated audience. It also falls at a propitious time on the marketing calendar, midway between the Super Bowl and the NBA Championship. Plus, advertisers like the quality and unpredictability of the tournament's matchups, which sets it apart from the blowout-prone Super Bowl. Pepsi put all its Super Bowl spots this year in the first three commercial breaks because it feared a lopsided score would prompt viewers to tune out. "With the NCAA, we feel confident the fans are going to be glued to their seats until the final seconds," says Giangola.

This year should be no exception. The finals matchups are a dream: Polished Duke meets the theatrical Indiana under coach Bobby Knight, while the Cincinnati's understated Bearcats take on Michigan's freshman Fab Five. No wonder March Madness has CBS and its sponsors howling at the moon.

By Mark Landler
New York



At-the-buzzer heroics
such as Laettner's
are making
viewership jump

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Dealers and Communications

Sugar Ray Leonard



NEC



ONE CEO compared
re-entering the EQUITY
MARKET to going
back home and finding an
eight-lane HIGHWAY where
MAIN STREET used to be

In short, re-entry could not be more
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More than ever, returning issuers face
uncertainty in the marketplace. Today's
investors are increasingly sophisticated and
knowledgeable. Their decision to invest—or
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lane highways.

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equities market, we'd like to be involved.

LEHMAN BROTHERS

EDITED BY HARRIS COLLINGWOOD

THEY'RE BA-ACK

If you thought the '90s had killed off the species *Yuppie americanus*, you thought wrong. Yupsters are stirring again, judging from a comparison of Commerce Dept. statistics from February, 1992, and July, 1990, the first month of the recession. So order up a frozen margarita and check out the BW Yuppie Index:

Product category	Sales in Feb., 1992*	Change from July, 1990
	Billions of dollars	Percent
RESTAURANT MEALS	\$200.66	6.16%
CONSUMER ELECTRONICS	51.95	6.08
FOREIGN TRAVEL	43.72	15.54
JEWELRY	30.17	-4.68
BOATS	8.94	15.89

*ANNUALIZED

DATA: COMMERCE DEPT.

TWO HEADS BETTER THAN ONE FOR SEARS?

► If some shareholders have their way, Sears Chairman and CEO Edward Brennan could be forced to share power. The latest Sears proxy contains a resolution requiring the company to split the jobs of chairman and chief executive and install an outside director as chairman.

Sears may be the first major U.S. company to face such a resolution, which is sponsored by the New York City Employees' Retirement System. Other proposals include one to hire an outside investment bank to consider breaking up the company, whose financial-services units have outperformed its retail business. Sears management opposes both resolutions.

AMERICAN STEEL IS ON ITS OWN

► A steel trade war may be brewing. On Apr. 1, President Bush allowed the so-called Voluntary Restraint Agreements governing steel to ex-

pire, leaving U.S. producers without protective quotas for the first time since 1984. Meanwhile, talks on a new global steel trading agreement fell apart over the sticky issues of subsidies and antidumping provisions.

A divided U.S. steel industry never mounted a strong lobbying campaign to extend the quotas. Now that they have expired, most major producers plan to use existing U.S. antidumping laws to halt unfairly priced imports. Expect a barrage of dumping cases this spring—and possible retaliation by South Korea and other steel-producing countries.

LTV AEROSPACE ENTICES MORE SUITORS

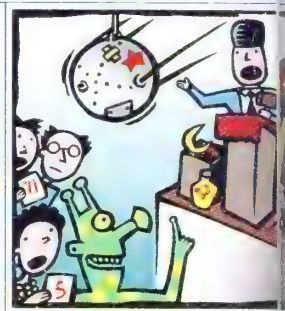
► A bout of international bidding has broken out over the aerospace and missile divisions of LTV. On Apr. 1, as expected, Thomson CSF, the defense and electronics giant that's 60%-owned by the French government, bid \$280 million for the missile unit, while the Carlyle Group, a Washington investment bank, offered \$120 million for the aircraft parts business. LTV had agreed in February to sell both divisions for \$355 million to a new company jointly owned by Martin Marietta and Lockheed.

Martin and Lockheed are not likely to bump their bid.

STAR DRECK: THE COLLECTIBLE GENERATION

As objets d'art go, it's a doozy: a seven-foot hollow sphere weighing 5,060 pounds. It's in good shape, having orbited the earth for only two weeks in 1990. And if this Soviet satellite won't fit on your coffee table, you could use it as a bed. "It'd be like sleeping in your mother's womb," says Paris auctioneer Hervé Poulain. He'll put it on the block on Apr. 23, in the world's first public sale of a space vehicle.

The satellite's builder, Russia's KB Photon space company, selling it to scare up hard currency and to publicize its planned entry into the business of launching Western satellites. Poulain expects bids from museums, American collectors, maybe even decorators with wealthy clients. With its burns and pockmarks from reentry, the satellite "is very pretty as sculpture," he says. The price? Bidding will start at \$90,000. Poulain hopes the sky's the limit.



Instead, they are relying on political opposition to a foreign sale and LTV's own stated preference to force Thomson and Carlyle out of the race.

CAT TO STRIKERS: 'SHOW UP OR ELSE'

► The five-month-long strike by 16,500 Caterpillar workers represented by the United Auto Workers has taken a nasty turn. Caterpillar on Apr. 1 announced that striking employees must return to work on Apr. 6 or risk losing their jobs to permanent replacements. The construction-

equipment giant told UAW members that the company was imposing the terms of a final contract proposal made in February. That offer failed to meet UAW demands and was rejected.

The hardball tactic is a belated move for Caterpillar CEO Donald Fites. The company believes that many workers are strike-weary and will gladly return. But the UAW may have shored up union resolve recently by handing workers \$2,000 apiece to supplement their \$100-a-week strike pay.

A GLUM OSCAR NIGHT FOR GE

► Activists engaged in a boycott of General Electric have found a new way of getting attention: They won an Oscar. On Mar. 30, the film, *Dead Deception: General Electric Nuclear Weapons, and Our Environment*, won the Oscar for best documentary, shot on subject. It was produced by Infact, a Boston-based group whose mission is to force GE out of the nuclear weapons business. In her acceptance speech, filmmaker Deborah Chasnoff urged the event's 1.5 billion viewers to "boycott GE."



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NSTL TEST RESULTS, DECEMBER 1991

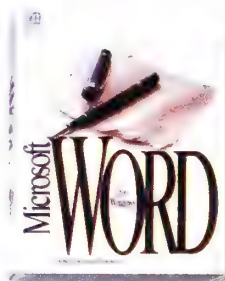
	Word for Windows	WordPerfect for Windows
Preferred to use	79%	21%
Easier to learn	71%	21%
Easier to use	83%	13%
Would purchase	79%	21%

WordPerfect for Windows to accomplish every word processing tasks.

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BACK HOME, FAMILIARITY WITH BROWN MAY BREED CONTEMPT

He was the youngest person ever elected governor of his state. Bright and ambitious, he proposed radical reforms. But his administration was marked by policy lapses, arrogance, and mismanagement. One top aide went after being convicted of money laundering. Arkansas Governor Bill Clinton? No, that's California's Jerry Brown, the anti-Establishment crusader who has been hurling accusations at Brown for many of the same sins. Brown's mistakes have ensured that even if Clinton wins the Apr. 7 New York primary, the Arkansan will find the state bleeding from a thousand wounds and his chances of beating George Bush diminished.

Brown hopes to damage Clinton by denying him the nomination, delegating the *coup de grâce* in California's June 2 primary. But New York controls Clinton's future as a spoiler. If Clinton loses decisively, he may have the nomination locked up before California. But if Clinton ties or beats Clinton in the Empire State, he'll be a factor to the end. Ironically, though, Brown's newfound success could do him in: The more seriously he's taken the more he'll come in for the same criticism that Clinton has suffered in the cluttered streets of New York.

His record sounds very convincing—if you know him," says Bud Lembke, editor of *Political Pulse*, a respected California newsletter. Trouble is, Californians know Jerry Brown excruciatingly well. As chief executive for 10 wild and woolly years, from 1975 to 1983, he got both the highest and lowest approval ratings of any modern governor. On the plus side, Brown was out in front on opening top government jobs to women, minorities, and the disabled. His "revolution" set the national pace for fuel efficiency, emission controls, and environmental cleanup.

Brown made some colossal mistakes. Take his appoint-

ments. Brown named his onetime driver and Agriculture Secretary, Rose E. Bird, as chief justice of the state Supreme Court. The liberal Bird infuriated Californians by blocking every execution she could. Voters booted her out in 1986, the first time a California high court justice lost reelection. And while Brown has made much of Clinton's dealings with an Arkansas businessman who was convicted on drug charges, he never mentions Richard T. Silberman, his onetime chief of staff. The founder of the Jack-in-the-Box fast-food chain is serving a four-year term for a 1989 money-laundering conviction.

DOPE-SMOKING HIPPIES. Then there's Brownian economics. As governor, he ran up such huge budget surpluses that he ultimately sparked a tax revolt. Then he embraced tax-cutting with a vengeance, leaving the state with a \$1.5 billion deficit. Now, Brown rails against Clinton for raising gasoline taxes in Arkansas, never noting that he did the same in California.

Californians may detect some other inconsistencies. The governor who once called for a North American common market now savages the idea as a scheme to "export high-paying U.S. jobs." Brown belittles Clinton's call for a national youth service, citing his own California Conservation Corps as the model

for such proposals. But while the CCC is well regarded today, former Brown Chief of Staff B.T. Collins, now a Republican assemblyman, describes it then as a mess "populated by hippies who wanted to smoke dope and stare at the moon."

Back East, where Brown, in the words of California pollster Mervin J. Field, "has stretched the definition of political chameleon to its very limits," these pesky details have been overlooked. But once Brown heads home, he's due for a rendezvous with reality. It's called his record.

By Douglas Harbrecht and Richard S. Dunham in Washington



BROWN: SERIOUS SCRUTINY IS IN STORE

AL WRAPUP

ES

artisan gridlock leaves little room for serious tax legislation this election year. But the Treasury Dept.'s tax is looking for ways to tackle a handful of thorny but important issues. Among the items high on the agenda of Fred T. Goldberg Jr., the aggressive former head of the Internal Revenue Service recently named Assistant Secretary for tax policy: reviews of the alternative minimum tax, the tax treatment of bankruptcies and corporate restructurings, and tax rules for financial products such as swaps. The Treasury is also working to implement "taxpayer bill of rights" enacted

by Congress to curb IRS abuses. Goldberg will probably have to wait until next year for legislative solutions to most of these problems. For now, the tax chief will be happy just to get the debate under way.

REGULATION

Count food processors as yet another big U.S. industry learning that there are worse things than federal regulation. State regulations that force corporations to comply with 50 sets of different and sometimes conflicting rules, for instance. Currently, there are no federal rules covering the environmental aspects of food packaging, which is a major source of solid waste.

So states are stepping into the breach, with Massachusetts and Florida, among others, considering requirements on the amount of recycled material that must be used in packaging. This is prompting food companies to seek regulation by the Federal Trade Commission—which would preempt states from imposing their own rules. "The whole industry is based on the premise that we can market in all 50 states," says Jeffrey Nedelman of Grocery Manufacturers of America. But for the moment, at least, the industry's hopes are frustrated by the Bush Administration's moratorium on new regulations—a move designed to help business.

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JAPAN'S LOSSES ARE NOBODY'S GAINS

A plunging stock market and a modest stimulus plan bode ill for the world economy

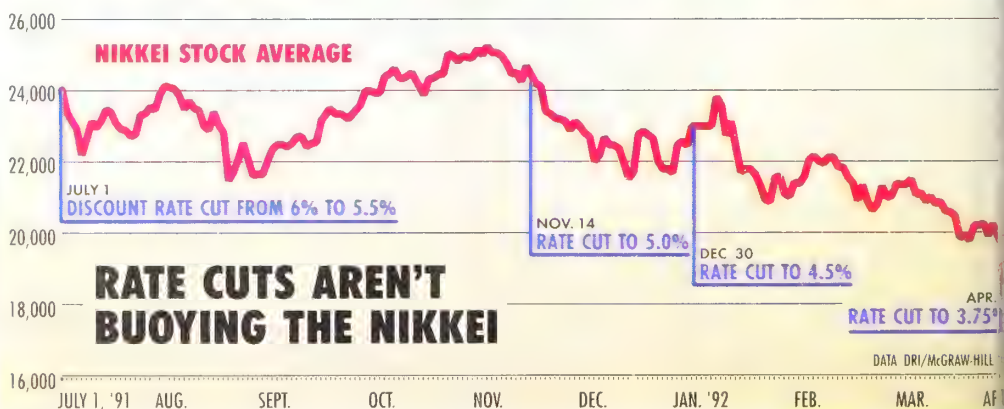
P Prime Minister Kiichi Miyazawa and Bank of Japan Governor Yasushi Mieno may have thought they were instilling confidence in a Japan facing its first major recession since 1975. But Miyazawa's \$37 billion economic stimulus plan, unveiled on Mar. 31, and Mieno's three-quarter-point discount-rate cut a day later have elicited a rousing chorus of boos. On the Tokyo Stock Exchange alone, prices sagged nearly 6% (chart). "The economic package was a wet rag," snapped Jason C. James, market strategist at James Capel Pacific Ltd.

That assessment has troubling implications—and not just for Japan. Unless Miyazawa and Mieno come up with a more aggressive economic strategy soon, the stock market is almost sure to erode even further. An additional drop of 20%, says Eric Elstob, vice-chairman of London's Foreign & Colonial Management Ltd., could prompt big banks to call some of the hundreds of billions in loans they have extended around the world. The banks have as much as \$150 billion in nonperforming assets domestically and abroad. Write-offs of that scale would wipe out much of their equity.

But even if all the losses are not taken, the banks are running short of one category of capital. They are allowed to count as capital part of any unrealized gains on their vast holdings of corporate shares. But the market's 50%-plus decline since 1989 has already wiped out most of these profits. As a result, the \$450 billion Sakura Bank Ltd. and sever-



MUCH TO REPAIR: BUSINESS LEADERS ARE URGING MIYAZAWA TO HIKE PUBLIC WORKS SPENDING



al others now fail to meet the internationally agreed-upon 8% capital-to-assets ratio set to take effect next year.

Even worse, Japan's ambivalent stand risks leaving Tokyo the odd man out in the global economy. The Federal Reserve and the Bush Administration, trying to pull the U.S. out of recession, and the Germans, spending heavily on reunification, are likely to bridle at any hint that they should help pump up Japanese demand as well. Yet in effect, that is

what's happening. Even though it risks sparking new trade tensions, Japan appears to be trying to export its way out of recession, much as it has done before.

As the economy has cooled over the past year, Japanese imports have fallen 15%. But the country is now running \$10 billion-a-month trade surpluses as manufacturers look to foreign consumers to relieve bulging inventories and keep production up at hundreds of factories bit-

g the easy-money 1980s. "Companies are trying to push their products more," says Long-Term Credit Bank of Japan Ltd. economist Nobuyuki Ueda. The move is coming just as Japan's big partners are urging Tokyo to open more of their goods. European business leaders are seeking greater access to Japanese markets, including pharmaceuticals and telecommunications.

Japan has risen to the economic challenge before. Two months into fiscal 1992, Prime Minister Yasuhiro Nakasone has pumped up \$44.4 billion in extra spending to pull Japan out of a downturn caused by *endaka*, the soaring value of the yen. Miyazawa's current move is hardly as bold. It seeks to cut spending on utilities, among other things.

But for the most part, it moves up front the outlays that are already scheduled for the fiscal year that began Apr. 1. As a result, business leaders and legislators are now urging Miyazawa to announce a new program, highlighting public works spending and also worth \$37 billion. That could boost economic growth from a standstill to 2.4% this year, estimates Salomon Brothers Asia Ltd. economist Robert A. Feldman. Many expect a plan in a few months, if only to keep Miyazawa's scandal-plagued Liberal Democrats from losing seats in the upper-house elections.

CHANGE OF MIND? Japan can increase its growth. The Organization for Economic Cooperation & Development figures Japan's budget is in surplus to the tune of 2% of GNP. Washington and Japan are running deficits of 3% to 4% or more. With falling stock prices and the real estate price drop in 17 years, the household balance sheets, economists say the Bank of Japan could also move to rekindle growth. Japan's dis-inflation rate remains well above the historical low set in 1987, when the economy was nowhere near as sluggish as it is today. With unemployment only 2%, the banker Mieno sees no further cuts in sight. But many traders believe he will change his mind.

Many economists, the current slow-down would be a propitious time for Miyazawa to launch more wide-ranging structural changes. Permitting rice imports and rezoning costly urban farmland would allow land prices to fall and needed houses and apartments to tilt on former rice paddies. Lowering the 80% top personal income tax rate also help. But those remedies will probably have to wait. For now, Miyazawa's No. 1 mission will be getting his country out of reverse—if not for Japan's sake, then for the sake of the ailing world economy.

Ted Holden in Tokyo and William H. Hall in New York, with Richard A. Cooper in London

CHINA



CHINESE "REEDUCATION" CAMP: TOYS, TOOLS, AND CLOTHING ARE TYPICAL PRISON PRODUCTS

STANCHING THE FLOW OF CHINA'S GULAG EXPORTS

American companies are taking the initiative as the feds crack down

Last year, after BUSINESS WEEK uncovered evidence that goods made in Chinese prisons were winding up in the U.S. consumer market, many American companies said flatly that their products were legit (BW—Apr. 22, 1991). But suddenly, they are gripped by a case of the jitters, as more and more prison-produced goods make their way to the U.S. To reassure customers, pressure groups, and management itself, some blue-chip U.S. companies are facing the issue head-on. They are unveiling bold plans to ensure that no foreign prison goods are in their inventories.

Heavyweights such as Sears, Levi Strauss, and Nike are establishing corporate codes of conduct for their buyers, suppliers, and contractors, as well as instituting tough new procedures for auditing their imports. "More image-conscious companies are going to have to take similar steps," says William Patterson, director of corporate affairs at the Amalgamated Clothing & Textile Work-

ers Union (ACTWU), which prodded Sears, Roebuck & Co. into action. For the first time, some companies are sifting through their global supply networks to try to determine who is really providing them with goods. In many cases, that's not so easy, because some Hong Kong intermediaries are expert at keeping their Chinese supply lines secret.

HIGH PRICE. The cost of being on the wrong side of the issue is rising. Labor unions are leading the charge and targeting other retailers besides Sears. As consumers return to the stores, no company wants to be tainted by charges of doing business with the Chinese gulag. Importing prison products is illegal, and Congress is poised to impose crippling penalties on importers of forced-labor goods. The U.S. Customs Service is conducting its own tough investigation.

Alarmed by reports of prison goods from China reaching the U.S., the ACTWU began taking aim at Sears in November, 1991. The union, which holds several thousands of dollars in Sears stock, noticed that the company was selling Chinese-made toys, tools, clothing, ceiling fans, and audiocassettes—the kind of goods known to be made in Chinese prisons. They requested that Sears' board of directors produce a report on the company's practices of buying Chinese-made goods.

Instead, on Mar. 31, Sears announced

Congress is poised to impose crippling penalties on importers of forced-labor goods from China

MAC GORRISON

that all contracts with Chinese suppliers will include written guarantees that their goods don't come from prison factories. The company will cross-check its suppliers with a list of Chinese prison facilities and will conduct surprise inspections of mainland plants. While Sears' Senior Vice-President and General Counsel David Shute says the company has no reason to believe it has purchased any prison products, the new guidelines will shine a brighter light on the web of Hong Kong intermediaries Sears uses to place some Chinese orders.

'AT RISK.' Levi Strauss & Co. also is banning forced-labor goods in a new set of guidelines that reflect "the company's values," says Robert H. Dunn, vice-president for corporate affairs. The jeansmaker has launched an audit of all its global operations, involving 600 contractors in more than 30 countries. In

China, Levi officials plan visits to every supplier to inquire about the use of prison labor. It will be costly, Dunn says. "But if the image of our brands is at risk, the cost could be far greater." Recently, Levi severed ties with its supplier in the U.S. territory of Saipan following revelations that it was employing imported Chinese workers under slavish working conditions.

Shoemaker Nike Inc. now spot-checks all of its Chinese facilities, where 10% of its shoes are made. And Reebok International Ltd. has audited all of its suppliers in China. Hong Kong-based Odyssey International, maker of such brands as North Face parkas and Head skiwear, assures U.S. customers that none of its clothing is made in Chinese prisons. CEO William N. Simon has hired inspectors at 75 Chinese factories supplying Odyssey with some 6 million garments each year.

Congress is jumping on the bandwagon. Representative Frank R. Wolf (Va.) is proposing to jack up fines for U.S. companies that knowingly import prison goods from \$1,000 to \$250,000. "Right now, the fine is so low that it's almost an incentive to import," Wolf says. His bill has the backing of Customs and the Treasury Dept.

Even stiffer regulations could be coming. Representative John Miller (D-Wash.) has proposed that all U.S. companies doing business in China be required to file yearly reports with the State Dept. certifying that they are not buying from prisons. Many business executives object to this proposal, but they don't start policing themselves. Congress may do it for them.

By Amy Borrus in Washington and Joyce Barnathan in New York, with Paul Engardio in Hong Kong

SOUTH KOREA

CAN MR. HYUNDAI BECOME MR. PRESIDENT?

Maybe not, but Chung is shaping the debate over Korea's future

Chung Ju-Yung isn't from Texas, but the 77-year-old founder of the \$50 billion Hyundai Group has a Ross Perot knack for shaking things up. Both are self-made tycoons turned political mavericks. But South Korea's Chung is proving to have even more muscle than his U.S. counterpart. His two-month-old Unification National Party scored a major victory in elections last month. Now, Chung is angling to become Korea's next President. If he pulls it off in December elections, he is promising a brand-new political and economic era.

Chung's jump from business to politics comes at a time when Korea seems primed for change. President Roh Tae Woo is under fire as inflation soars to 15% and Korea's industrial competitiveness slips. And with Korea running a \$10 billion trade deficit, charges are flying that Roh is failing to move industry up the technological ladder. Enter Chung, a fresh face amid shopworn politicians. "Before, Korea used to be one of the [four] dragons," he said at a recent rally. "But after Roh came to power, the dragon became a tadpole."

Chung has seen the change firsthand. His Hyundai Group was a leader in Korea's emergence as an economic dynamo



CHUNG'S PARTY WON 10% OF THE ASSEMBLY SEATS

in the mid-1980s, enabling him to amass a personal fortune worth \$4 billion. But now the conglomerate is suffering as the country's problems intensify. In an interview with BUSINESS WEEK at his party's headquarters in Seoul, Chung spoke of his reform program: "Our foremost priority is to shift from government-controlled politics, economics, and social policies toward private, civilian-controlled policies." That would include further opening of domestic markets.

EASIER MONEY. Korean conglomerates, or *chaebol*, would be released from credit restraints and other government fetters that hinder their global competitiveness. At the top of Chung's hit list are interest rates, now running as high as 30%. "Unless we move toward interna-

tionally competitive interest rates, this economy can't bounce back," he says. With easier money, Chung argues, the *chaebol* could spend much more aggressively on research and development and automation. "His new vision is very attractive in terms of revitalizing the economy," says Koo Suk-Mo, vice-president of the business-backed Korea Economic Research Institute.

Even if he doesn't win, Chung has helped reframe the debate about Korea's future. Thanks largely to his party, last month's elections were the first to focus more on the economy than on security and human rights. Governed by authoritarian generals or ex-generals for decades, most post-cold-war Koreans are ready for the removal of the military from politics. "The vacuum has to be filled, and maybe the *chaebol* will be the next decision-

maker," says Bin Sohn, executive vice president of Asset Korea Ltd., a full management firm.

That sentiment has touched off a raging debate about the role of Big Business in government. Some executives, such as Yoon Young-Suk, president of Daewoo Corp., fear that Hyundai would be favored if Chung succeeds. Li Dong-Sung, president of Samsung's economic research institute, agrees that Hyundai's rivals will worry about gaining an unfair advantage. But, he says, "the UNP can better express conglomerates' interests, so we can expect the government to start paying more attention to our needs."

Korean voters may ask themselves: they want a President who will be



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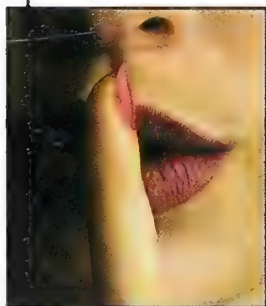


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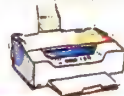
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octogenarian for most of his one five-year term. Chung doesn't look any worse for wear after an intense campaign in which he made 189 speeches in two weeks.

HOPING FOR A SPLIT. While Koreans like many of Chung's policy prescriptions, most remain deeply suspicious of the power and motives of any *chaebol*. Stunning as the UNP's performance was, the party garnered just 17% of the popular vote, or 10% of the National Assembly's seats.

Chung still remains a dark horse in the presidential race. In response to his clean-government platform, opponents are bound to dredge up stories of purported improprieties in his personal and business affairs. But as the election nears, there's a good chance the ruling party will break up into rival factions, each with roughly equal support.

That could play into Chung's hands. "He's hoping the ruling party will split, which would create the opportunity for a coalition," says Suh Sang-Mok, a senior

policymaker for the Democratic Liberal Party. "Then he could wield some power." Even in a three-way race, Chung's party could determine who wins. "He potentially the most powerful person in this country," says Park Ungsuh, president of Samsung Petrochemical Co. Chung's bid may sound like a long shot, but considering that he wasn't a politician two months ago, no one is ruling him out.

By Robert Neff and Laxmi Nakarmi
Seoul

GERMANY



PIECH TAKES OVER A COMPANY THAT'S MAKING BIG GAINS IN MARKET SHARE—BUT NOT PROFITS

VW'S NEW BOSS HAS THE BEETLE IN HIS BLOOD

Porsche heir Ferdinand Piëch's No. 1 priority will be cost-cutting

It looks like a dream play to cash in on Europe's borderless market. Next Jan. 1, German auto maker Volkswagen will get an Austrian chief executive with French Huguenot ancestors, Ferdinand Piëch. His deputy will be Daniel Goeudevert, a Frenchman whose family has Flemish roots. Outgoing CEO Carl H. Hahn leaves them a nearly \$50 billion company that is spending \$50 billion in five years to expand across Europe from Czechoslovakia to Spain.

Now, all Piëch has to do is make it all hum like the sporty Audi Quattro he produced as head of VW's luxury-car unit. Over the past decade, Hahn's drive has taken VW from fourth to first in the European race for market share. It has 16%, vs. 12.6% for second-place Fiat. Trouble is, profits haven't followed, holding at about \$660 million for the last

two years. VW's costs are too high. Piëch needs to get them under control if he is to withstand the tidal wave of competition from lower-cost Japanese and Asian rivals, as well as newly aggressive U.S.-owned operations led by GM Europe.

An engineer, 54-year-old Piëch seemed predestined to run VW. His granddad, Ferdinand Porsche, designed the legendary VW Beetle, and his mother's Porsche Holding group is the VW/Audi importer for Austria. Piëch owns 10% of Porsche, was once its research and development chief, and is on its supervisory board. He recently tried to eject Arno Bohn, Porsche's fourth CEO in little more than a decade. Bohn survived the onslaught. But the message to managers at Audi and VW as well as Porsche is crystal clear: If they don't perform to Piëch's exacting standards, they're in trouble.

In contrast, the 50-year-old Goeudevert, who lost out to Piëch in the race for the top job, prefers negotiation to conflict. But he can be outspoken. Much to the fury of auto executives, he recently said it might be a good idea to impose speed limits on Germany's unrestricted Autobahnen. He learned the business from a Cook's tour of the European industry working at Citroën, Renault, and Ford before joining VW.

FIRST ROUND? The new team will start with a round of cost-cutting at VW's German plants. Over the next five years, 12,500 of VW's 127,000 German jobs will be axed. Labor leaders, including Metall's tough boss Franz Steinkühler, agreed mainly because the cuts will come through attrition. Some analysts think the cuts will have to be deeper. Unless VW averages annual output gains of up to 3%, another German work force cut of 10% will be needed by the mid-1990s to stay level with the best in Europe, says John Lawson, auto analyst at Nomura Research Institute in London.

Hahn started a trend of moving output from high-cost Germany. He switched production of VW's bottom-line Polo compact to its Spanish subsidiary, SEAT. That garnered savings estimated by analysts at \$400 to \$500 per car. But VW is going to have to repeat the same trick with bigger and more profitable midrange cars, selling at \$18,000 and up. That's because Japanese producers are adjusting to European Community restrictions on sales volume by moving into higher-priced models.

Piëch also must make Hahn's late expansion projects pay off. These include a \$3 billion production line at Zwickau in eastern Germany and a \$6 billion investment in Czechoslovakia's Skoda. Hahn followed a Japanese-style strategy of grabbing market share, using Italy's Fiat and others out of European deals, without worrying too much about short-term profits.

That's a luxury VW can no longer afford. Since taking over at Audi in 1982, Piëch has doubled profits, to \$85 million last year. Now he has to show that big money can be made from the huge turf Hahn has staked out for VW in Europe.

By John Templeman in Berlin

RUSSIA WITH TREPIDATION: THE WEST TAKES A GAMBLE

After months of hand-wringing, the West has finally come up with a \$24 billion loan-and-aid package to buttress the former Soviet Union as it gropes its way toward a market economy. Although not quite a Marshall Plan, the package is far-reaching and a big gamble on Russian President Boris Yeltsin. Included are \$18 billion this year from seven leading industrial nations for balance-of-payment loans, debt deferrals, and short-term credits. An additional \$6 billion will go to a ruble-stabilization fund. George Bush announced U.S. support for the plan on Apr. 1. This grand

gesture includes granting membership in the International Monetary Fund, which will administer the aid to Russia and other republics. The new largess is a boon for Yeltsin. The ruble fund, for example, is intended to boost the currency's value to 50 units to the dollar, the rate it now fetches on domestic exchanges. That support should give Russians and other former Soviets a shot of confidence in their currency. The fund could set the stage for convertibility with foreign currencies—opening the door for more foreign investment.

SHOCK THERAPY. The republics also will get balance-of-payments help. Russia, for example, will be given unrestricted access to \$4 billion in loans to import virtually anything deemed necessary to enhance reform. About \$3 billion is expected to be paid out after July. The huge cash infusion will help with input bottlenecks, which are hampering the Russian economy. Many factories and farms are close to shutting down because they don't have the cash to import spare parts and raw supplies. A big beneficiary could be the oil industry, which has vast petroleum reserves but antiquated technology. Western technical advisers are expected to urge Russians to modernize their oil gear quickly to boost hard-currency earnings.

Another hot idea is to set up loan funds to nurture a network of entrepreneurial plants and farms to produce more consumer goods and food. "Compared with other countries, small and midsize business is absent here. And the economy cannot survive without it," says Georgi Matyukhin, chairman of the Russian central bank.

The IMF help comes as the former Soviet Union enters a transition period that could be disastrous without outside aid. Yeltsin is already facing increasingly bitter opposition to the shock therapy he started three months ago—by hiking prices

and cutting state subsidies. He soon plans to move into a more risky phase of his reforms: restructuring or selling off big industries that now serve as giant social-welfare agencies, providing everything from day care to vacation *dachas*. Meanwhile, industrial production could plummet 25% or more by yearend, and unemployment could soar to 10 million.

The question is whether the Western aid will be enough to cushion Yeltsin from popular pressures to abandon his program. The temptation will be for him to print

money to ease consumer discontent and preserve jobs. While the IMF will lecture Yeltsin on sticking to tight-money policies, it won't insist on a degree of austerity that would jeopardize him. Says a close IMF observer: "The fund is facing such enormous political pressure to do something for the Russians that it's not going to look too closely at performance."

The West is betting that Yeltsin and his reforms will survive. It's a roll of the dice, but there are few other options. And so far, the Russian President has shown that he has the stomach for tough economic measures.

By Rose Brady in Moscow, Brian Bremner and Mike McNamee in Washington, and Peter Galuszka in New York



AIRLIFT: HUMANITARIAN AID ARRIVES IN MOSCOW

BAL WRAPUP

BAZIL

President Fernando Collor de Mello's Mar. 30 Cabinet sweep could clear the way for faster economic reform. After widespread reports of high-level corruption, Collor demanded the resignation of all his ministers. He appointed only a few, including Finance Minister Marcilio Marques Moreira, the architect of Brazil's market-opening policy.

Collor's reform efforts have been hampered by the weakness of his National Renovation Party, which holds only 8% of the seats in Congress. But now, in a switch, he is bringing representatives of opposition parties into the

Cabinet. That could make it easier for him to win congressional approval of such proposals as the privatization of Petrobrás, the oil giant, and Telebrás, the state telecommunications company.

GERMANY

Hopes are fading for a midyear cut in German interest rates to boost Europe's sagging economies. Despite a downturn that's lasting longer than expected, the Bundesbank is preoccupied with what it sees as a new inflation threat. Money-supply growth has recently accelerated beyond the central bank's target of 3.5% to 5.5% a year. That's helping to boost inflation—to nearly 5%. If wage settlements, cur-

rently averaging a stiff 6%, don't come down, the bank may well raise rates again rather than lower them.

ITALY

The sanctions recently voted by the U.N. Security Council could claim an unintended victim: Italy. Libya, where over 1,500 Italians work, has relied on Italy as its preferred European trading partner. Rome worries that side effects from the sanctions, which include a ban on air travel to Libya, could further sap an Italian economy already weakened by recession. The measures will go into effect if Libya fails to hand over two suspects in the 1988 Pan Am airliner bombing.



GAME, SET AND



ATCH TO TAIWAN

Would it surprise you to know that some of the best tennis players in the world use racquets made in Taiwan?

Or that the first graphite racquet was developed and engineered in Taiwan over 15 years ago?

Today, graphite is the material of choice for tennis players around the world and racquets, very well made in Taiwan, are the choice of champions.

In fact, the tennis racquet shown here is just one example of the fine craftsmanship coming from Taiwan today. The result of having a deep commitment to making technology the best it can be.

IT'S VERY WELL MADE IN TAIWAN



GULB

Being a lawyer at Motorola Inc. is tough these days. While attorneys at other companies might churn out lawsuits against customers or suppliers with the push of a button, Motorola's 100 in-house lawyers must seek all possible alternatives to landing in court: arbitration, mediation, even private judges who settle disputes for a fee. After all this, Motorola lawyers who still want to go to trial must fill out a form estimating legal costs, likely damages, and chances of victory. "The form is so onerous that they gladly work out an alternative settlement rather than screw around with that form," says General Counsel Richard H. Weise, the architect of Motorola's resolution program.

If that sounds like an unproductive use of an attorney's time, think again. Since starting the program in 1984, alternative dispute-resolution techniques have slashed Motorola's litigation costs by as much as 75%. "It's that dramatic an impact," Weise says.

'LOST OPPORTUNITY.' Motorola's obsession with finding new ways to settle disputes isn't typical. But it is rapidly becoming so. After years of mounting frustration, disdain for the U.S. legal system is now so intense that corporations are taking the law into their own hands. From General Mills to General Motors, companies are fighting their battles privately, through such innovative techniques as rent-a-judge service and minitrials. Pacific Gas & Electric Co. even pays for its opponents to sit down with a mediator. "What's worse than the money wasted on the court system is the lost opportunity to find solutions," says Howard V. Golub, PG&E's general counsel. "Our energies should not be spent on recreational litigation."

The legal revolt among corporations is only one facet in an unprecedented rethinking of the U.S. civil justice system. Every branch of government is pushing some package of legal reform. Congress is overseeing "advisory committees" in every federal court to try to speed up cases and cut costs. Judges are overhauling the federal rules of civil procedure.

TORT!

TOO MANY LAWYERS AND TOO MUCH LITIGATION. HERE'S A BETTER WAY

Even the White House is responding to the business backlash. Through President's Council on Competitive Government, the Bush Administration is promoting an array of probusiness reforms, including such controversial measures as requiring losers to pay the victors' legal costs. The debate has inflamed the passions of everyone from defense lawyer Alan Dershowitz to legal scholars like RAND researcher Deborah T. Denno to lawyer best-selling author Scott Turow. When the tort system where injured parties sue for damages stands a better chance of being reformed in Congress is mulling a uniform product-liability law to replace the patchwork of state laws and make it tougher for plaintiffs to win damages. States are tightening up on punitive damages and pain-and-suffering awards. And they're finding cheaper ways to resolve medical malpractice suits, such as by compensating injured patients regardless of whether the doctor is at fault. "There's a very strong popular revolt over excessive lawyering, excessive delays, and excessive costs," says Martin F. Conover, president of the American Tort Reform Assn. "When you add it all up, it's impressive."

BALANCED SCALES? Yet many worry about a headlong rush for legal reform that could do more harm than good. Some of the proposals threaten the cornerstones of the U.S. legal system: an abundance of individual rights and open access to courts. Critics fear that by making it easier to sue, limiting access to evidence before trial, and even penalizing attorneys who lose, reformers may be pushing the pendulum too far in the other direction. The critical question is how to make the legal system more efficient and less costly while safeguarding indi-

vidual liberties. "A broad statement that going to court is evil is very destructive to our democratic process," says Pamela Gilbert, legislative director for Ralph Nader's Congress Watch. "We should take pride in our legal system."

But even Gilbert agrees that parts of the system are breaking down. America's legal bills are going through the courthouse roof. Last year, law firms grossed more than \$100 billion, estimates a Commerce Dept. report. That doesn't include what

companies spend on their own legal departments—and what they must pay to resolve suits. Since 1971, the number of attorneys has almost tripled, to 780,000—far more per capita than in Britain or Japan (table). "The prime beneficiaries of the legal system are lawyers, not victims and not society as a whole," says Ralph Warner, co-founder of Nolo Press Inc., a Berkeley (Calif.) publisher of legal self-help books.

The overloaded courts are only making matters worse. Since 1960, the number of civil suits in federal courts has soared 300%, even after dropping from a peak in 1985. In the state courts, civil suits have jumped by more than 4 million in the past six years (table). And that's on top of an exploding backlog of criminal actions that push business cases to the back of the line. "You can't divorce the civil courts from the criminal courts," says Sol Wachtler, chief judge of the State of New York. "There are delays because of the clog in criminal cases."

DRAINING. Executives fear the U.S. legal system is crippling America's ability to compete in the global marketplace. A BUSINESS WEEK/Harris Poll of top executives at corporations drawn from the BUSINESS WEEK 1000 (page 66) found that 62% of those surveyed believe the U.S. civil justice system significantly hampers the ability of American companies to compete with Japanese and European rivals. A striking 83% of those polled say the fear of lawsuits has more impact on decision-making within their company today than it did 10 years ago. "The American economy can no longer afford this process," says Ronald L. Davis, assistant general counsel at Dow Chemical Co. "The system's inefficiencies are eating away at our industrial base." He says Dow Chemical spends "in excess" of \$100 million a year on legal services and liability insurance.

Just how much litigation drains the economy is a matter of fierce debate. Vice-President Dan Quayle claims that Americans spend more than \$80 billion a year on direct litigation costs and higher insurance premiums. Indirect costs, including the expense of avoiding liability, he says, reach \$300 billion annually—about 1.8% of the nation's \$5.7 trillion gross domestic product. But legal scholars such as Marc S. Galanter, a professor at the University of Wisconsin's school of law, attack those figures as "the product of casual speculation." Instead, he cites a 1986 study by RAND's Institute for Civil Justice. It put the cost of the U.S. tort system—including court ex-



Cover Story

penses, legal fees, and the value of lost work—at between \$51 billion and \$58 billion.

Whatever the tab, America's companies are fed up with watching their legal bills erode profits. Some are locked in unproductive court brawls with rivals. Four-year-old Cyrix Corp., a Richardson (Tex.) semiconductor maker, has been battling Intel Corp. In December, 1990, Cyrix filed an antitrust suit accusing Intel of an anticompetitive campaign to keep Cyrix co-processors out of the market. A month later, Intel sued Cyrix for patent infringement. While the judge has yet to rule in that case, Intel just filed another patent-infringement suit against Cyrix in response to reports that Cyrix was about to introduce a chip that mimics Intel's top-of-the-line 486 microprocessor. The Cyrix chip was introduced on Mar. 30 (page 95).

SUE CITY. Other companies, meantime, are shunning domestic markets out of fear of product-liability suits. Biomet Inc. sells spinal implants for back problems virtually all over the world—with one glaring exception. "We don't feel confident in the U.S. with such a product," says Dane A. Miller, CEO of the Warsaw (Ind.) orthopedics company. "Our legal system in America is totally out of control."

Countries such as Britain and Japan hold down costs by making it more difficult to sue and harder to win. In the U.S., each side in a lawsuit usually pays



"If American businesses are concerned about the burdens of legal expense, they could control their own lawyers better."

Deborah Haskins
CEO, Richardson International
(Cyrix Corp. parent)

its own legal costs, regardless of the outcome. But Britain and other countries force losers to pay the winners' fees as a way to discourage frivolous suits. American companies spend as much as 80% of their legal bills on discovery, which lets parties review an opponent's evidence before trial. In Japan, discovery doesn't exist (page 64).

The hallmarks of the U.S. legal system—jury trials, contingency fees, and punitive damages—encourage the "I'll

sue" mentality. Dow Chemical gets 1 with some 2,000 new product-liability claims in the U.S. every year, but on about 20 such claims are filed against in the rest of the world, says Davis. He notes that while many European countries have adopted broad U.S.-style product-liability laws, many lack such things as contingency fees, discovery and jury trials. The Midland (Mich.) chemical maker spends an average \$250,000 just to get to trial. Says Davis, "Even when we win, we don't win."

Many executives say they settle even frivolous suits to avoid the legal fees. Others settle, they say, to escape the long-shot risk of punitive damages. The claims are "used to extort money," says Robert W. Pommerville, general counsel of Beverly Enterprises Inc., a leader in the nursing home industry. Pommerville says it takes "a real gutsy individual" to go to trial on punitive-damages claim because juries are so unpredictable.

But settling can bring its own headaches. In 1984, Alan F. Shugart, CEO of Seagate Technology, was accused in class action of artificially inflating its stock price. Attorneys for the Scott Valley (Calif.) disk-drive maker persuaded him to settle in 1991, for \$9 million, he says. Two subsequent suits were filed in 1988 and 1991, which copied the class action verbatim—from the wording of the charges to the misspellings. Bo

COURT-ANNEXED ARBITRATION

Parties must present their cases to experts or retired judges. The parties can accept the decision or seek a trial

SUMMARY JURY TRIAL

Parties sum up their cases before a judge, jurors, and others. The jurors give an advisory verdict to start settlement talks. If there's no deal, the parties go to trial

THE COURTHOUSE OF THE FUTURE

Parties headed to court are now choosing from an array of public and private alternatives for resolving disputes. By the year 2000, parties may be greeted in court by a clerk who directs them to the appropriate procedure. Here's a sampling of what's available

EARLY NEUTRAL EVALUATION

After a suit is filed, a private attorney meets with the parties. The attorney hears both sides and assesses the merits to promote fast settlements

RENT-A-JUDGE

Parties hire private decision-makers, often retired judges, to settle their cases. The parties pay hourly rates up to \$350. The judge's decision may be appealed

DATA CENTER FOR PUBLIC RESOURCES, BW

are still pending in the courts. Now, Shugart goes on the offensive at the point of a lawsuit. Last year, for example, the company laid off an undisclosed number of employees. When a group of them joined with a coalition of unions and sued for insufficient wages, Seagate publicly threatened to sue, clearly stating it would fight over court costs as well as punitive damages on the grounds that the laborers' suit was frivolous. The coalition withdrew the case.

SAVINGS. Rather than get caught in the system, corporations are dropping out. Already, some 600 top corporations have signed a pledge drafted by New York's Center for Public Resources, a nonprofit group that promotes alternatives to litigation. The center states that the signers will encourage negotiation and other forms of "alternative dispute resolution" before running to court against other signers. Last year, for the first time, law firms nationwide made a similar pledge, and almost 100 firms have signed on. The Center estimates that avoiding court saved 142 companies more than \$100 million in legal costs for disputes concluded in 1990. General Mills Inc. has long required a commitment to alternative dispute resolution on all contracts it signs—cutting legal costs for contract disputes to a minimum, says General Counsel Robert L. Whitehill. Now, the Minneapolis food company is moving toward requiring a similar commitment from its employees. But the company's best experience with such techniques occurred in 1987. On the verge of going to court with a supplier, Whitehill says, the sides agreed to argue their case before the CEOs of both companies. After six days of arguments, the parties agreed that General Mills would get a \$1 million settlement.

Other companies are devising formal systems to settle routine disputes. In 1990, General Motors Corp. hired Dispute Inc., based in Washington, to set up systems in each of its divisions for resolving dealer disputes. The systems range from nonbinding, voluntary mediation at Cadillac to binding arbitration at Chevrolet, Pontiac, Oldsmobile, and GMC Trucks, and were put into the dealers' five-year franchise agreement. William Coulter of Detroit's Coulter Cadillac just mediated a dispute with GM auditors over a warranty issue. Both sides argued their case before a GM executive, a dealer, and an in-house dispute staffer. They settled in a day, with a cost of \$3,000 to GM and about \$1,000 to Coulter. Says Coulter: "The process was fair."

At Motorola, the process of staying out of court starts early. Its lawyers nationwide learn how to counsel execu-

tives within the company on avoiding conflicts by focusing on better contracts, improved product quality, and truthful salesmanship. The law department also follows Motorola's total quality management program to eliminate wasteful labor and expensive errors. "Cutting legal costs is like reducing the cycle time in manufacturing," says Weise, the general

counsel. "Our goal is to reduce the 'dispute cycle'—the time between the event that causes the dispute and the resolution."

There's more to Motorola's legal program than just staying out of court. The company rides herd on its outside lawyers to deliver quality service at the lowest possible cost. In a radical break with

COMING TO TERMS —WITHOUT BRINGING IN THE LAWYERS

Lawyers for Pacific Gas & Electric, Union Oil, and Thermal Power were preparing to fight one of the largest suits ever filed in Sonoma County (Calif.) Superior Court, when the three top executives decided that there had to be a better way. Rather than spend a year at trial, the executives resolved most of the issues privately—without their lawyers. To do the rest, they called in an outfit based in Orange, Calif., known as Judicial Arbitration & Mediation Services Inc.

The JAMS mediator met often with the principals, even going up in a helicopter to survey the field at the heart of their contract dispute. The case settled last month, with JAMS's bill less than six figures.

Tapping into the fervor to cut litigation costs, JAMS is a part of one of the fastest-growing sectors of the law business: alternative dispute resolution. Started in 1979, it's the U.S.'s leading for-profit resolution company. This year, it expects to hear 14,000 cases and see sales grow to \$30 million, up 25% from 1991. JAMS has 18 offices in four states and a panel of 175 former judges. With \$15 million from E. M. Warburg, Pincus & Co., JAMS plans to keep expanding.

It's not alone. Washington-based Endispute Inc. is also expanding its dispute-resolution services. And Philadelphia-based Judicate Inc. boasts more than 600 former judges offering arbitration and mediation. It's easy to see the appeal. Alternative resolution techniques save on discovery and provide privacy and flexibility in scheduling.

But the driving force is the cost. JAMS charges between \$300 and \$350 an hour—a far cry from the \$300 an hour a battery of lawyers might each charge litigants. And, unlike a litigated

case, the typical JAMS case can be resolved in hours or days. "Alternative dispute resolution is like the hula hoop—why didn't someone else think of this before?" says JAMS CEO John K. Trotter, a retired state appellate judge.

Critics say problems arise when JAMS judges go beyond simple mediation and render decisions that can be appealed in the courts. Such private judging accounts for 1% of JAMS cases, but this tactic could soar in California, where parties can leapfrog the long



**SALES AT TROTTER'S
RESOLUTION SERVICE
ARE SOARING**

court lines by getting a private ruling and then appealing it.

To head off government regulation, JAMS is developing guidelines for disclosing conflicts of interests, including prior contacts with parties. It's also devising a procedure for speedy handling of complaints. Given the need for faster and cheaper alternatives to the gridlocked courts, JAMS may soon be looking more and more like the Federal Express of the dispute business.

By Jane Birnbaum in Los Angeles, with Morton D. Sosland in Philadelphia

Cover Story

tradition, Motorola also refuses to pay for lawyers' travel, meals, and other incidentals. Instead, the law firms must figure such expenses into their hourly billing rate. Motorola forces the lawyers to follow a strict script that outlines a step-by-step procedure for resolving disputes. "They really bristle, because they're not used to that kind of participation by a client," Weise says. "Some outside counsel just can't do it."

Yet even companies that support such techniques remain skeptical that the new procedures will make a dent in the amount of litigation. Alternative dispute resolution works only when both parties agree to it, they say. A small company may be muscled into court by a larger rival with more resources. Other companies insist on trials to achieve public vindication. And individuals and their lawyers may be unwilling to step outside the system. Abandoning a trial "would do away with punitive and compensatory damages," says FMC Corp. General Counsel Patrick J. Head. "That's where the big scores have been."

It may not be that way for very much longer. More than 1,200 courts across the country are offering various alternatives to trials. In Texas, a court can order a case to mediation. In Colorado, lawyers who fail to tell clients about alternative dispute resolution now can



"Lawyers get too much. I would cap fees and take some of what lawyers get and give that to elementary school teachers, nurses, health workers, people who really do good for society"

ALAN DERSHOWITZ
Harvard Law professor and
criminal defense lawyer

be disciplined for breaching their ethical duties. And in California, some overworked judges refer cases to a private settlement company, Judicial Arbitration & Mediation Services Inc., based in Orange County (page 63).

Many courts are offering alternatives to trials right in the courthouse or other neutral sites. The federal court for the Northern District of California in San Francisco sends up to 300 cases a year through a settlement program known as "early neutral evaluation." Under it, the parties meet with a volunteer attorney who is an expert in the disputed subject matter. He sizes up the cases, gives his opinion, and then asks whether the parties want to work out a deal. An early study found up to 40% of these cases settled on the spot. Such programs are redefining the role of courts. "In the future, instead of walking into a building called a courthouse, you might walk into the Dispute Resolution Center," says Scott H. Bice, Dean of the University of Southern California's Law Center. **LOSERS WEEPERS.** The debate over legal reform in Washington can only speed these changes. Last year, President Bush signed an executive order to reform the vast swarm of government lawyers—the largest group of lawyers litigating in the federal courts. And Vice President Quayle delivered a scathing, widely publicized speech to the American Bar Assn., blasting lawyers for the nation's lack of competitiveness. In February, the White House unveiled a bill that draws from Quayle's 50-point agenda. The bill promotes such things as

THE JAPANESE SOLUTION: KILL ALL THE LAWSUITS

When IBM sued Hitachi Ltd. for industrial spying in 1982, the Japanese company got a shocking introduction to legal battles, American-style: Hitachi's first bill from its U.S. law firm exceeded its total payments for legal services in Japan since the company was founded in 1920.

No wonder legal reformers in the U.S. look wistfully at Japan. Its courts aren't cluttered with liability suits, and lawyers are about as scarce as American cars. While the U.S. prides itself on individual rights and equal access to the courts, critics charge that the Japanese legal system discourages litigation. Perhaps. But the culture's distaste for direct confrontation helps ensure that most legal disputes are resolved privately and more efficiently than in the U.S. "In Japan, a litigious person is not welcome," says Toshiro Nishimura, senior partner at Nishimura & Sanada, a top international law firm in Tokyo.

Barriers to litigation in Japan start with legal education (table). To become a *bengoshi*, or lawyer, one must win a spot in the Legal Training & Research Insti-

tute. But the government-run school admits 2% of its 35,000 applicants annually. So Japan's exclusive legal club has just 14,336 lawyers—and grows by only 400 *bengoshi* per year. There are 780,000 lawyers in the U.S., which has twice Japan's population.

COSTLY RECOURSE. Those who can find a lawyer to take their case encounter other roadblocks. Critics of the U.S. legal system complain that parties abuse discovery, which grants access before trial to potential evidence held by an opponent. Japan is at the other extreme: It has no discovery at all. And the difficulty of obtaining evidence makes it especially tough for consumers to win product-liability suits (BW—Mar. 9). "I have often said to clients that I am 100% certain that they would win their case—but where's the evidence?" says Nishimura. "You can't force the other side to disclose."

Plaintiffs also must have deep pockets. Japan bars two key methods of sharing the cost of litigation: class actions and contingency-fee arrangements. At the same time, plaintiffs must pay an up-

front fee to their lawyers of up to the damages sought in liability suits, plus a nonrefundable filing fee. In courts of one-half of 1% of the damages. In 1991, a small Seattle-based law firm provided a Japanese client with \$240,000 worth of materials and labor for which the company claims never paid. To file a \$240,000 suit, it pay its lawyers \$20,204, including a filing fee of \$1,200. "It's too expensive to pursue that course," sighs a manager at the company. "We've lost a lot of money."

Damage awards in Japan don't come close to the estimated average of \$1 million per case paid last year in product-liability suits in state courts. Feb. 7, the Tokyo District Court ordered Chisso Corp., a chemical company responsible for one of Japan's best-known industrial poisoning cases, to compensate 42 victims. The award: \$1.3 million, or \$31,000 per victim.

When disputes arise between companies, attorneys often are the last ones involved. Salesmen and front-line managers are the chief problem-solvers. In

Rarely do companies battle
 Nissan Motor Co. is involved in
 Japan, only one of which in-
 other company. The rest con-
 and consumer disputes, which
 most of the suits against com-
 Japan. "We would never sue a
 like our own," says Nissan le-
 gement manager Kenji
 Only when a case
 aded for court will
 call in a *bengoshi*.
 eep matters quiet,
 panies may opt for
 settlements, where
bengoshi arbitrators
 ease privately and is-
 lding decision. Nissan
 nsisted on a 15% dis-
 fault factory equip-
 olled by an affiliate.
 n sue, Nissan settled
 at. "It was an amica-
 ment," says Toriumi,
 ved us time, money,
 lationship."
 titude keeps costs



fighting until the end. But that's only the beginning. More attention must also be paid to state and federal courts so that they can run more efficiently. And Congress cannot continue to pass federal criminal laws that inundate court

down. Most of Nissan's legal expenses go not for pricey outside legal help but for a modestly paid staff of a dozen tax sleuths, 50 patent experts, and 30 legal specialists. Lower bills free up cash for research and other areas, and enable more competitive pricing than U. S. companies can afford.

Suits are few, but some experts argue that Japan has more legal practitioners than the statistics reveal. Japan's corporate halls are stocked with non-*bengoshi* legal experts. Sony Corp. employs 120,

dockets without also quickly filling judicial vacancies. As of Mar. 31, there were 120 vacant federal judgeships, or about 14% of the federal bench.

CHEAP AND DIRTY? Alternatives to trials such as arbitration and mediation should help lighten the courts' burdens, but certain safeguards are needed. Now, proceedings are held in private without regard to whether a public interest or important legal question is at stake. And the resolution business is largely unregulated: Anyone with a business card or stationery can set up shop.

Instead, standards must be established so that mediators are qualified. The proceedings must also be open to the public—and the press. Alternative justice shouldn't become just another way to avoid disclosure of health and safety dangers. And some disputes involving novel or constitutional issues must remain in the public courts. Private dispute resolution can only follow the law, not set new precedents.

What's good in the legal system must be protected. As lawmakers, attorneys, and executives wrestle with legal reform, they must ensure that individual rights are not sacrificed in pursuit of swifter and more economical justice.

By Michele Galen in New York, with
Alice Cuneo in San Francisco, David
Greising in Chicago, and bureau reports

BW/Harris Poll appears on page 66.

for example. Japan also has about 50,000 licensed tax practitioners who offer services similar to those of U.S. tax lawyers. About the same number of scriveners draft court papers and give legal advice, while 5,000 non-*bengoshi* patent specialists perform services similar to those of U.S. patent attorneys. Add them all up, and Japan has more legal practitioners per capita than the U.S., or 42 per 10,000 people vs. 29, says Raymond August, assistant professor at Washington State University.

Some Japanese argue that Japan should have more lawyers and that certain laws should be rewritten to favor consumers. Critics also say it should be easier for the Japanese to redress clear wrongdoing. Still, the bias against courtroom solutions remains strong. "I work in the legal department," says Nissan's Toriumi, "but I would never ask a lawyer to resolve a problem in my own life." The belief that disputes should be settled amicably is something American legal reformers only now are beginning to embrace.

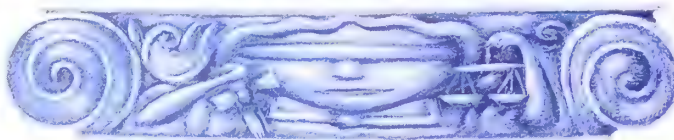
By Ted Holden in Tokyo

JAPAN'S APPROACH

- ▶ Limits the number of attorneys passing the bar exam to 2% of 35,000 applicants
- ▶ Forces would-be plaintiffs to pay an up-front fee to their lawyers of up to 8% of damages sought
- ▶ Bars contingency fees, class actions, and other fee-sharing devices that make it easier to sue
- ▶ Lets judges, not juries, set damage awards, which rarely exceed \$150,000, even when the victim has been killed
- ▶ Bans discovery so that plaintiffs are denied access before trial to an opponent's potential evidence
- ▶ Nurtures a strong cultural attitude that confrontation is to be avoided and looks down upon those who sue

THE VERDICT FROM THE CORNER OFFICE

Corporate executives think the high cost of civil justice is a drag on U.S. business and the economy. Fully 83% say their decisions are increasingly affected by the fear of lawsuits, and a 62% majority say the legal system significantly hampers U.S. competitiveness. Executives know whom they blame for the problem: plaintiffs, the



contingency-fee system, and generous juries. They are also quite firm about the solutions. An overwhelming 97% favor much more use of alternative methods to re-

solve disputes, and 91% want judicial screening of cases. But most oppose restrictions on expert witnesses and don't want to see more government spending on the courts.

HIGH COURT COSTS

Here are some possible reasons for the high cost of litigation and civil justice. For each one, please say whether you think it is a major reason, a minor reason, or not a reason for the high cost.

	Major reason	Minor reason	Not a reason	Not sure
The knowledge that major corporate defendants and their insurance companies have deep pockets	92%	8%	0%	0%
Contingency fees that enable people to sue without any financial risk	85%	13%	1%	1%
Juries that hand out awards that are too high	79%	17%	3%	1%
Laws or regulations that make it too easy to sue	64%	29%	6%	1%
Outside corporate lawyers who drag out cases to jack up their hourly fees	47%	45%	7%	1%
Large corporate litigants that drag the process out in an effort to outlast opponents with fewer resources	34%	55%	9%	2%
Companies that compete in the courtroom instead of in the marketplace	13%	60%	26%	1%
Companies that rush potentially dangerous products to market, opening themselves to subsequent lawsuits	9%	70%	19%	2%

POSSIBLE REFORMS

Here are several proposals now under consideration to rein in frivolous litigation and cut legal costs and delays in the civil justice system. Please tell me whether you favor or oppose each of the following:

	Favor	Oppose	Not sure
Making much greater use of alternative dispute resolution methods, such as arbitration, mediation, and private judges	97%	2%	1%
The judicial screening of cases to eliminate apparently frivolous or very weak claims	91%	9%	0%

Requiring the loser in civil suits to routinely pay the winner's legal costs	83%	17%	0%
Restricting the pre-trial discovery process	49%	43%	8%
Restricting the use of expert witnesses	28%	66%	6%
Increasing federal and state spending on the courts	28%	69%	3%

LITIGATION'S IMPACT...

In your company, would you say that the following have a major impact, a minor impact, or almost no impact on your business?

	Major impact	Minor impact	Almost no impact	Not sure
The high cost of defending and protecting the company from litigation	40%	49%	11%	0%
Fear of litigation that hampers the introduction of valuable new products or entry into new markets	10%	47%	42%	1%
Legal issues that divert valuable management time and energy from running the business	44%	50%	6%	0%

...AND HOW IT'S GROWING

Would you say that the fear of lawsuits has more or less impact on decision-making within your company today than it did 10 years ago?

More impact	83%
Less impact	5%
No difference	11%
Not sure	1%

COMPETITIVE BURDEN

Do you feel that the U.S. civil justice system significantly hampers the ability of U.S. companies to compete with Japanese and European companies, or don't you feel that way?

Does hamper	62%
Does not	32%
Not sure	6%

Edited by Mark N. Vamos

Survey of 400 senior executives at corporations drawn from the BUSINESS WEEK Top 1000. Interviews were conducted Jan. 27-Feb. 11, 1992, for BUSINESS WEEK by Louis Harris & Associates Inc.



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A TIME - HONORED TRADITION
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The Putnam Companies One Post Office Square, Boston MA 02109.

TIME HASN'T TAMED WALLY HICKEL

At 72, Alaska's maverick governor is waging war on Washington

Southern California thirsts for water. Alaska is awash in it. So why not build a 2,000-mile undersea pipeline, as flexible as a garden hose, and let Alaska turn on the spigot? At \$100 billion, even parched Los Angeles County rejects the idea as too costly. But Alaska Governor Walter J. Hickel still likes it. "The Romans did it," he says matter-of-factly. "People have been moving water from where they have it to where they need it for years." Besides, Hickel's closest adviser—a voice he calls "the little man inside"—is all for the plan.

Wally Hickel, the man who paved the way for Alaska's North Slope oil exploration in the 1960s, is back. And at 72, he still spouts ideas as sprawling as the state itself. He wants to plow through the Arctic Ocean with Russian icebreakers to create a northern sea route to Europe. He's paying to study the feasibility of "beaming" hydroelectric power over long distances using microwaves. He's pushing for another 800-mile pipeline across the Alaskan wilderness—this time to transport natural gas instead of oil. And because Congress forbids oil drilling on lands such as the Arctic National Wildlife Refuge, he's suing Washington for lost royalties.

PARADISE LAST. Hickel's bulldozer-happy administration enrages environmentalists. Conflict-of-interest charges and his bellicose eccentricity make many Alaskans cringe. But he also strikes a resonant chord in a state that feels misunderstood by the rest of the nation. For most Americans, the Exxon Valdez oil spill drove home the notion of Alaska as the last frontier—a pristine wilderness to be preserved for future genera-

tions. Alaskans don't see it that way. Their state depends on oil for 85% of its revenues, and production is down (chart, page 70). Many welcome any ideas for creating new revenue sources, however farfetched.

That's why the man on the street sees Hickel as an antihero of sorts. He may be off-the-wall, but his fiercely independent politics draws many adherents. "What the U. S. has done to Alaska is a scandal," he says. "If a Third World country were similarly abused, the U. N. would step in. Alas-

ka is different culturally, geologically, climatically. It shouldn't be hamstrung by federal regulations."

Such talk emanates from a lifetime of pugnacity, a personal history emblematic of Alaska's frontier spirit. Hickel grew up on a Kansas farm during the Depression and spent much of his time throwing punches as a Golden Gloves boxer. He won the state welterweight championship in 1938. After high school, with job prospects scarce and college not an option, he headed to Alaska, arriving with 37¢ in his pocket.

UP AND DOWN. Hickel worked as a carpenter, bartender, and logger before gradually building up a small fortune in construction. Though his first wife died in 1943, he produced six sons, five of them by his current spouse, Ermalee, herself the daughter of pioneers. Politics came next, and he was elected Alaska's second governor in 1966. His administration encouraged development of the rich Prudhoe Bay oil field—the northern terminus of the Alaskan oil pipeline—by punching a road through the tundra to service it. That caught the attention of President Richard Nixon, who picked Hickel in 1969 as his Interior Secretary.

The next year, though, Hickel criticized Nixon's handling of antiwar protesters and was fired. He became a political gadfly, running for governor in Alaska three times and losing each election. He kept busy expanding his \$150 million real estate business, which includes the Captain Cook, a landmark hotel he built in Anchorage. And he became increasingly involved with Yukon Pacific Corp., which he formed in 1983 to develop a natural-gas pipeline.

In September, 1990, Hickel saw a chance for a political comeback. Hours before the deadline, the lifelong Republican filed as the Alaskan Independence Party's candidate for governor. Left out by the two major-party nominees, 39% of the vote elected Hickel, who promised to drastically cut spending and fight the feds. Lack of endorsement from most of Alaska's legislators, editors, academics, and environmental activists only enhanced his appeal.

Hickel didn't waste any time. The Sierra Club's Pat

'Alaska is different culturally, geologically, climatically. It shouldn't be hamstrung by federal regulations'





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ela Brodie puts it this way: "He immediately started acting as though he had a mandate to push forward wild-eyed schemes that were not economically viable." In addition to his water-pipeline idea, he advocated building a new port in Anchorage—despite studies saying it was not needed. He also put the \$11 billion gas pipeline on the front burner. His most controversial move was to push through a big road project on public land despite a lack of federal approval. That enraged Brodie and other environmentalists largely because it dumped debris into a fishing river.

WHOSE LAND? Later in 1991, a state-appointed prosecutor charged that his 12% Yukon Pacific stake was a conflict of interest. He was forced to divest. When several of his appointees also faced censure or were forced to resign because of perceived ethical lapses, many Alaskans got fed up. Some 20,000 of them have signed a recall petition, citing incompetence. In response, Hickel has backed off some of his more controversial projects, including the port and the water pipeline. The road project will be submitted for federal approval.

All the controversy hasn't stopped Hickel from planning a salvo of lawsuits against the federal government charging the feds with usurping Alaska's right to develop its oil properties, fisheries, and mineral resources. And he's pushing full throttle on the gas

pipeline. The motivation for all this: When the price of oil fell from \$21 to \$15 a barrel last year, the state's projected oil income plunged by more than a third. North Slope oil production is expected to fall to half its 1988 peak level by the year 2000. Some propose a state income tax to make up for a budget deficit that is expected to double to \$435 million in fiscal 1993, but Hickel doesn't like the idea. "We're not poor," he intones. "But we'll be poor if we're not allowed to have access to our land."

Critics would at least like to see him reduce spending—something he hasn't done, despite his campaign promises. Even his fans are concerned by the fiscal situation. "He is truly a visionary," says Michael J. Burns, CEO of Key Bank of Alaska. "But he sees the next 20 years much more clearly than the next 20 months."

Alaskans love pioneers. They also like government handouts: Oil brings a \$930 annual "dividend" check for every citizen, and state spending that is six times the U.S. average. Hickel aims to find a new gravy train. But if his big projects fail to show promise before his term ends in 1994, he'll have trouble convincing Alaskans he's more than just an expensive dreamer.

By Dori Jones Yang in Juneau

ALASKA'S OIL SLOWDOWN



Industries

EXPORTERS

LITTLE COMPANIES, BIG EXPORTS

Armed with faxes and phones, small companies are going global

Tiny Ohio-based Vita-Mix Corp. has been grinding and blending for 70 years. It rarely sold its high-powered blenders outside the U.S., relying instead on Americans' appetites for fresh-baked bread and vegetarian delights. But last year, with stagnation haunting the Midwest, the third generation of Barnard family owners went global. They hired James L. Smith, a Combustion Engineering veteran, as international sales manager. Now, exports account for 20% of the company's \$15 million a year in sales, and blenders are leaving the company's plant for 20 countries. Faxes from Venezuela to Norway pour in.

Vita-Mix's good fortune also shines on Olmsted Falls, a quaint town of 15,000 on the outskirts of Cleveland. While the region has hemorrhaged jobs, Vita-Mix has added 63 new ones in the past year, for a total of 113 employees. Its folksy headquarters is bustling as banks of telephone operators take 800-number calls from customers seven days a week. "Exporting is the salvation for our standard of living and the security of our workers," says Smith. "It makes me proud as heck."

Vita-Mix is one of thousands of hot new exporters helping to sustain U.S. export growth. To be sure, it takes a lot of \$495 blenders to equal one \$135 million Boeing 747 or one \$550,000 Caterpillar hydraulic excavator. And no one knows for certain how much of America's \$400 billion a year in exports comes from small companies with sales of \$5 million to \$300 million a year. Perhaps only 1 in 10 of these companies in America's rendition of the German *Mittelstand*, or middle sector, now exports, experts believe.

NICHE PLAYERS. This huge, uncharted area of the U.S. economy is now vital to sustain growth in exports. After years of double-digit increases in the late 1980s, U.S. exports grew at only 7.5% in 1991 and actually declined in November, December, and January. Now, it's up to the small fry to keep ex-

ports headed upward. "It's clear that export growth has come by bringing new entrants into the market. It's not just the majors expanding," says David L. Bloch, director of international trade forecasts for DRI/McGraw-Hill in Washington, D.C.

The biggest growth is coming in such items as medical products, scientific instruments, environmental systems, and consumer goods, where thousands of companies have carved niches. Some 87% of the 51,000 exporters tracked by Cognetics Inc. of Cambridge, Mass., employ fewer than 500 workers. "We know that the majority of exporters are small," says founder David Birch, a leading authority on small companies. These companies typically are private, closely held, or family-owned.

America's small companies are discovering, too, that the economics of exporting have changed, for good. Once, it was an article of faith that such companies would lose money for three to five years. Now, small makers of everything from potato peelers to pumps are using fax machines, 800 numbers, and overnight air express services to shave the once formidable costs of going global.

Other forces are also reshaping the export culture. Americans are now low-cost manufacturers after a long decline in labor costs and the dollar and a rise in productivity. They also find themselves with a treasure of high-quality products that are often known around the world. English is

AMERICA'S EXPORTS

FOREIGN APPETITES ARE GROWING

Countries accounting for the most growth of U.S. exports

COUNTRY	Billions of dollars		PERCENT
	1986	1991	
CANADA	\$55.0	\$85.1	53%
JAPAN	26.6	48.1	80%
MEXICO	12.4	33.3	268%
GERMANY	10.4	21.3	104%
BRITAIN	11.3	22.1	95%
KOREA	5.9	15.1	255%
FRANCE	7.2	15.4	113%
TAIWAN	5.2	13.2	154%

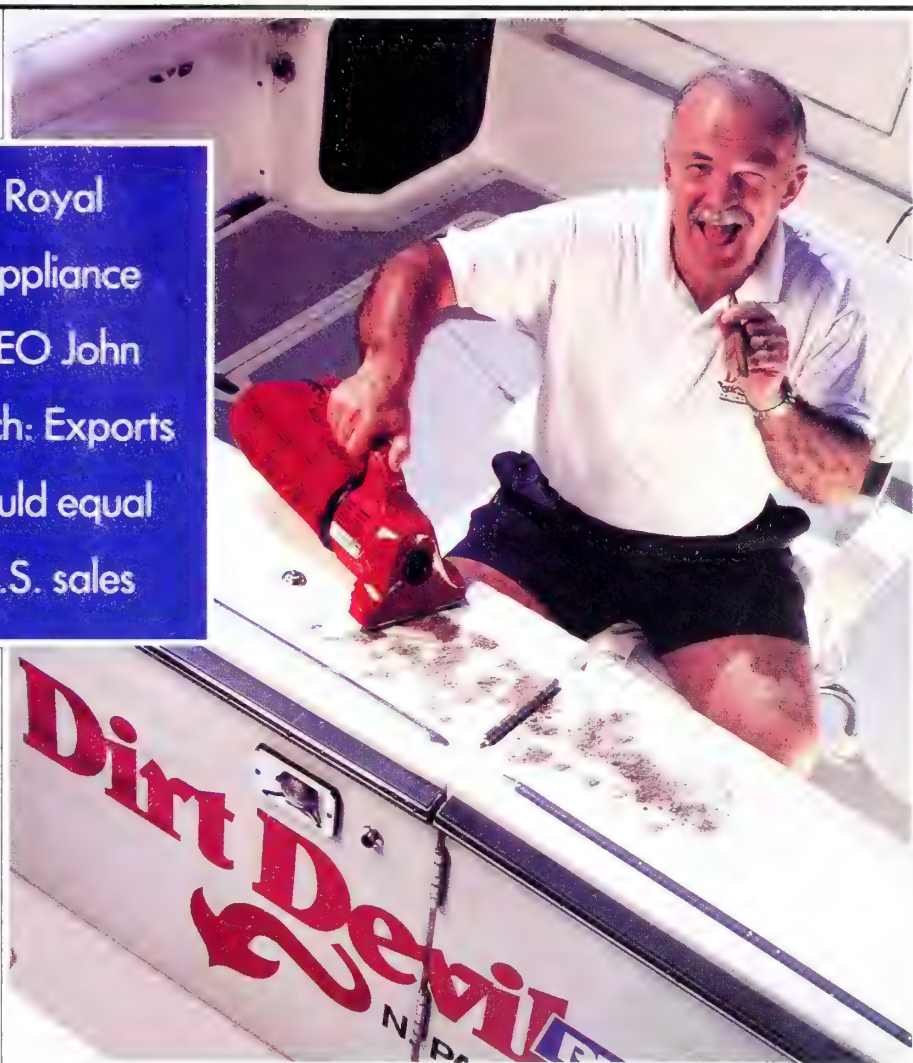
as the *lingua franca* of global business, which lowers language barriers. The business also gets an international influx since many immigrants entering the U.S. take key jobs in smaller companies. At the same time, downsizing at bigger companies has created a steady stream of U.S. executives taking their experience to smaller companies.

DEATH. This all shapes up as a structural shift in the U.S. economy—one that's not likely to be reversed if the value of the dollar edges up modestly. In fact, the core of the U.S. economy is gradually being internationalized. Five years ago, 15% of America's gross domestic product came from exports. The U.S. Census Bureau estimates it will reach 20% by the end of 1994, largely as a result of newcomers. Their skill would be low compared with Germany or Holland. But because of the size of the U.S. economy, it means the U.S. economy could still be in its early stages, with its rump end.

The proliferation of smaller U.S. export companies provides America with some insulation against the slowdown in growth in Europe, Japan, and Japan—America's largest markets. The small guys often key in on niche markets in America, Eastern Europe, and East Asia. They are still growing. The major Hispanic market in the U.S. and the proximity to Mexico and America are thrusting many smaller companies southward. Strong Ukrainian, Polish and Lithuanian links give companies in Chicago, Milwaukee, and Cleveland an edge in Eastern Europe. And the presence of many Asian high-tech entrepreneurs in the U.S. West Coast helps their companies pack the Pacific Rim.

The export "movement" is occurring with little help from state and federal governments. Unlike European or Asian exporters, the American infrastructure for arranging exports remains poorly funded and badly organized. In some cases, it is being cut back. The State of Illinois,

Royal
Appliance
CEO John
Balch: Exports
could equal
U.S. sales



which once boasted one of the country's most successful models, is cutting its export activities by 22% this year because of a budget crunch.

The U.S. Commerce Dept. gets high marks for its sponsorship of trade fairs and matchmaking programs in faraway capitals. But at the grass-roots level, a budget squeeze has forced the government to retreat from helping new-to-export companies. Altogether, some 18 federal agencies are involved in exports, and they rarely coordinate with each other. The major money-center banks in the U.S. also turn a cold shoulder to newcomers that are in need of export financing.

HIGH-TECH HOOKUPS. Even in the absence of a well-defined export campaign, small exporters are helping themselves, plugging into the technological revolution. The fax machine, in particular, has given grass-roots exporters a chance. "There's only one thing greater than the airplane, and that's the fax," says John Kirchgeorg, CEO of Life Corp., a maker of emergency-oxygen kits. With under \$5 million in sales, Kirchgeorg's company, located in the faded tannery district of Milwaukee, ships specially designed oxygen kits to 43 countries, mostly by air. He tries to respond to most faxed

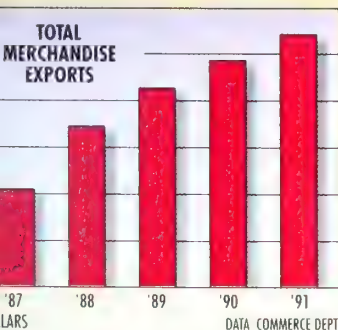
inquiries the day he gets them. Then, he sends off videotapes of his products by air express—a far cry from the era of clunky telexes and overseas mail.

Exporters also are using the telephone like never before. They set up toll-free 800 numbers that encourage foreign customers to call frequently. To help overcome the linguistic hurdle, American Telephone & Telegraph Co. has begun offering a 24-hour phone line that allows English-speaking Americans to make international calls with a translator. AT&T, MCI, and Sprint offer phone hookups that allow small U.S. exporters to send electronic-mail messages into their distributors' computers. Even tiny \$3 million-a-year Sharper Finish Inc. of Chicago, a maker of commercial laundry equipment, can keep in ready contact with 300 distributors in 30 countries. The result: Exports account for 60% of sales.

Bigger companies rely on satellite computer hookups. Royal Appliance Manufacturing Co. in Cleveland, a \$273 million-a-year maker of the Dirt Devil handheld vacuum, ties its computers to its European subsidiaries by satellite. Each day's sales in Europe are monitored and fed back to Cleveland. "It works like a champ," says CEO John A. Balch. Royal hopes its still-

SURGING

FLOW OF U.S. GOODS IS RISING



small foreign sales can eventually match its domestic revenues.

Other technologies are just beginning to be tapped. One is advertising on Cable News Network and other satellite-television channels. Likewise, the expansion of U. S. credit-card companies encourages foreign customers to buy products on the telephone with their card numbers. Perhaps the ultimate expression of technology's role is AT&T's new "The Export Hotline," a 24-hour-a-day data base that allows a potential exporter to call 1-800-USA-XPORT and get free export information by fax. All this technology has "substantially lowered the barriers of entry into the game," says Birch. "You can enter the international game with much fewer resources than was required 10 years ago."

Of course, technology alone won't do the trick. Americans also have to make good products at the right price. The surprise is that the small guys—even consumer-goods makers—do just that. Small and midsize U. S. companies are exporting rice cookers and high-quality china to Japan and cutlery to Germany. Sports gear such as motorized surfboards and racing motorcycles are in big demand. Treatment Products Ltd., a \$5 million-a-year company in Chicago, ships its high-end car wax to 15 countries.

Surprisingly, a lot of these pint-size Americans are taking on Japan. Midwest Tropical Inc., a \$5.5 million-a-year company in Chicago, sends designer aquariums to Japan and other countries. Its six-foot-tall vertical units, with fluorescent lighting and rounded corners, are a hit with Japanese whose homes are too small for bulkier tanks. The aquariums' prices: up to \$1,200. **MODEST COSTS.** Run by a husband-and-wife team, Kenneth and Susan Burnett, Midwest Tropical found Japanese distributor Shimada International, thanks to a State of Illinois export officer. Shimada insisted that Midwest Tropical adapt its product to Japanese quality standards—which meant new heaters and lights, for example. The Burnetts did everything Shimada asked. As a result, sales of about \$230,000 in 1990 doubled in 1991 and are growing again this year by 30%. "You have to say: 'I want into this country real bad. What do I have to do?'" says Ken Burnett.

In making these consumer-goods exports, the Americans boast a cost and quality advantage that stems from the modest cost of labor and highly automated production. That's



Invacare CEO Mal Mixon:
"We're just getting started"

one reason Invacare Corp., a \$263 million-a-year company in Elyria, Ohio, can boast of sales of wheelchairs and other home medical equipment to 40 countries. It projects \$75 million in international sales this year, including some \$24 million worth of goods exported from the U. S. These exports are growing at a 26% clip.

For its mass-produced chairs, it can drive

costs down to a minimum. Average hourly labor costs are \$13, including benefits. At Invacare relies on just-in-time manufacturing systems and automated systems that punch diodes and transistors into boards for the computerized controls. New carbon fiber composites are used to make the chairs light and maneuverable. "We're just getting started" in world markets, says CEO A. Malachi Mixon III.

STAYING POWER. Of course, for even a smallish U. S. exporter that has made it, there are others that have failed or lack basic information. American business people still have much to learn about exporting. But hard times at home, combined with new technologies and better manufacturing abilities, are propelling them outward. Unlike Detroit's Big Three, they are quick to adapt to foreign tastes, and they're willing to sort through the thickets of safety standards and health codes in such tough markets as Japan and Germany. "We see wide-open blue skies," says George W. Sanborn, CEO of Sanborn Inc., Wrentham (Mass.) maker of centrifugal equipment used in pollution-control efforts. Sanborn says he's counting on prospects in Czechoslovakia for a big boost, as much as 10% of an estimated \$25 million in sales this year.

Many abroad can't help but wonder: Will it last? Americans have a record of exporting when it's easy, then retreating when conditions shift. These new exporters, however, have a feel of permanence. At Vita-Mix, for example, President and CEO G. Ross Barnard, who learned Russian in the U. S. Army, has created a corps of employees who speak German, Spanish, French, and Arabic. He insists that the company's cultures be transformed from that of a small stay-at-home to a global player. "We're going to be thinking that we're part of the world," he says.

The reason is simple. With the domestic U. S. market stagnant and competition from bigger U. S. and foreign companies intense, it's the only way to stay in business. If you don't go overseas and don't know what's happening, you're not going to be ready for those people to come here and work you over in your backyard," says Barnard. "You have to take the ball out there." More and more Americans across the hemisphere are taking up the call.

By William J. Holstein in Cleveland, with Kevin Kelly in Chicago, and bureau reports

A SAMPLING OF SMALL U.S. EXPORTERS

Name	Product	Total sales/Exports as share Millions of U.S. dollars
CONSUMER GOODS		
INVACARE Elyria, Ohio	Wheelchairs, home medical equipment	\$263/10%
ROYAL APPLIANCE Cleveland	Dirt Devils	\$273/4%
MIDWEST TROPICAL Lincolnwood, Ill.	Aquariums	\$5.5/25%
LIFE CORP. Milwaukee	Emergency oxygen kits	Under \$5/50%
TREATMENT PRODUCTS Chicago	Auto wax	\$5/25%
CAPITAL GOODS		
UNITED AIR SPECIALISTS Cincinnati	Air cleaners	\$30/40%
AQUA-AEROBIC SYSTEMS Rockford, Ill.	Wastewater-treatment systems	\$28/12%
JOSEPH INDUSTRIES Bedford Heights, Ohio	Lift truck transmissions	\$6/10%
SHARPER FINISH Chicago	Laundry/ironing equipment	\$3/60%

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IS ALASKA BIG ENOUGH FOR THESE TWO?

Tiny MarkAir's fight with Alaska Airlines is getting bloody

When travelers talk about cut-throat competition among airlines, Alaska is not a market that springs to mind. But recently, the battle for passengers in the cold North has become red hot—and nasty. A carrier called MarkAir Inc. is challenging a former partner and the region's dominant carrier, Alaska Airlines Inc., with low fares that threaten Alaska Airlines' 19-year streak of profits. The battle is raging in the courts, too. And here's more spice for the drama: MarkAir Chairman Neil Bergt, a pal of Frank A. Lorenzo's, retained the former Texas Air Corp. chairman as adviser for a public offering.

This is far from the standard David vs. Goliath tale. True, MarkAir, a cargo airline until 1984, has one-ninth of Alaska Airlines' \$1.1 billion in revenues and nowhere near the resources. But there are bizarre twists: Until November, the pair enjoyed a cozy relationship that helped both pull in consistent profits. MarkAir was able to keep Alaska Airlines out of certain key markets as it fed passengers to the larger airline at Anchorage. But last fall, Bergt tried to sell MarkAir to Alaska Airlines. After he was rejected, Bergt declared war, plunging MarkAir into his rival's territory. Alaska Airlines terminated the joint agreements.

EASTWARD HO. MarkAir entered the prime Anchorage-to-Seattle market in late 1991 with a flock of low fares. Competitors matched them, and round-trip fares of \$300 to \$900 plummeted to \$200. Bergt doubled MarkAir's jet fleet, to 12 Boeing 737s. And MarkAir added jet service to cities in southeast Alaska, where Alaska Airlines had had a monopoly. Now, Bergt is weighing a new wave of expansion, into Oregon and California.



BERGT WAS SPURNED IN HIS EFFORTS TO SELL MARKAIR

That's where Lorenzo comes in. Bergt needs capital and felt that an obscure carrier such as his would have trouble raising it. So he tapped Lorenzo, whom he had met in 1981 while running Western Air Lines Inc., later bought by Delta Air Lines Inc.

Lorenzo's Houston-based consulting firm, Savoy Capital Inc., reviewed MarkAir's business plan and won Bergt introductions on Wall Street. Lorenzo says his firm isn't investing its own money. But he argues that MarkAir's prospects are good: By offering propeller-jet service within Alaska, he says, MarkAir is the "lifeblood to countless

small communities." And its recent expansion brings travelers "options"—lower prices. Numerous sources say Lorenzo helped line up Kidder, Peabody & Co. to underwrite an initial public offering for about \$35 million.

An IPO seems chancy, especially since the current chief executive would likely be elsewhere. "I've been fighting the battle all my life, and I'd like to sit out," says Bergt. "But I'd never leave MarkAir in bad hands." With Lorenzo at the wings, the possibilities are intriguing. Lorenzo says his own role is strictly advisory. But Robert J. Joedicke, an airline specialist at Lehman Brothers Inc., notes that Lorenzo's Jet Capital Corp. won control of Texas Air 20 years ago by converting consulting fees into stock. He adds: "Lorenzo has not always been one to make his objectives crystal clear."

ARCTIC FIESTA. Whatever Lorenzo's ultimate role, MarkAir has already caused Alaska Airlines real grief. Investors, fearful of the price war's effects on earnings, are backing off, and Alaska Airlines' stock has fallen 18%, to around \$19, from its high in January. Nearly a third of Alaska Airlines' revenues come from routes now served by MarkAir. According to Zacks Investment Research, analysts in the last 12 weeks have downgraded earnings estimates by 28% to \$1.17 a share for 1992. Prudential Securities Inc. forecasts a loss.

Alaska Airlines CEO Raymond J. Vece declined to comment, saying he is tired of responding to Bergt. His airline is responding plenty, pushing into Alaska cities where MarkAir once enjoyed a monopoly. Despite fare wars, it has maintained its high service standard. Recently, it ballyhooed its new service to Barrow, in the far north of the state, by throwing a Mexican fiesta for the entire town of 2,500. Still, Vece has said in interviews with the *Anchorage Daily News* that his airline has weathered challenges before and will weather this one. Analysts agree, but some note that low-cost Southwest Airlines Co. enters

the territory, troubles will only intensify.

MarkAir's own future is certainly open to question. Bergt says it could survive without the IPO. But the airline has been selling off assets to raise capital. It recently sold two large cargo planes for an estimated \$12 million to \$20 million. And in December, the airline sold and leased back three hangars without state authority, grossing



LORENZO: IN BERGT'S CAMP

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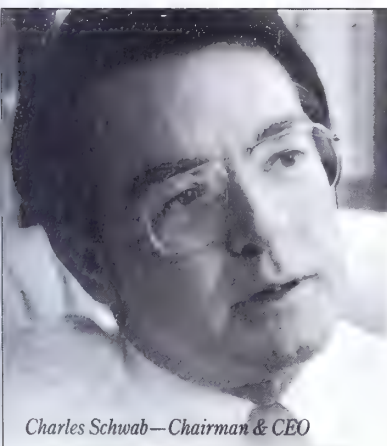
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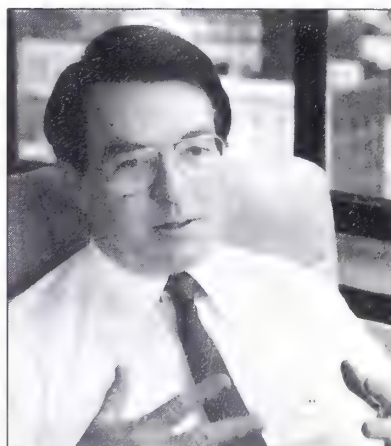
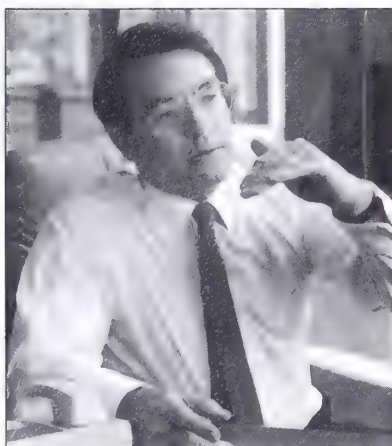
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1. Past performance does not indicate future performance. 2. The Economist, Index Funds: A Moving Average, August 11, 1990, p. 74. 3. The Schwab 1000 Index does not include privately held companies, investment companies and companies incorporated outside the U.S.

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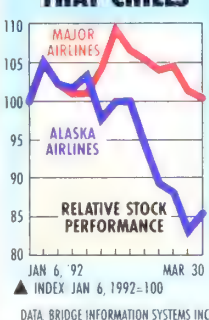
\$5.8 million. Scott Hamilton, editor of *Commercial Aviation Report*, says that given MarkAir's inevitable losses on developing new markets, "they would have to do something to generate fresh cash." As for an IPO, "I certainly wouldn't want to invest in the carrier that's going up against the competition MarkAir is going against." That now includes United Airlines and Delta.

Bergt argues his advantage is in MarkAir's low costs. "Alaska Airlines is an old dinosaur," he says. "They let their costs run amok." MarkAir's costs approach those of superefficient Southwest Airlines, Bergt claims, and MarkAir's strategy is the same: "If you get air transportation down cheap enough, people will travel. It's a matter of running a thinner, leaner airline."

Bergt, 56, has spent two decades trying to do just that. Reared in Alaska, he got his start flying propeller planes to the state's rural villages for cargo airline Alaska International Air Inc.

Bergt took the carrier private in 1979 in a leveraged buyout. The company flourished by transporting construction materials for oil exploration. Bergt moved briefly into the national aviation spotlight in 1981 when he became CEO at Western, but he left

COMPETITION THAT CHILLS



within 17 months.

He returned to Alaska International and began expanding into the more promising passenger business, renaming the carrier MarkAir. Initially, its chief competition was Alaska Airlines. But in 1986, Bergt worked out the marketing agreements with Alaska Airlines that made in-state fare wars between the two a rarity. MarkAir also purchased a commuter airline, sending propeller planes into 130 rural Alaska communities.

Relations between the two deteriorated last fall. Bergt says Alaska Airlines changed the terms of agreements. Vecchi says Bergt never complained. But by November, lawsuits were flying. Alaska Airlines accused MarkAir of stealing passengers. MarkAir alleged antitrust violations.

The rivalry shows no signs of cooling. MarkAir is continuing its low fares through the summer season. Alaska Airlines will likely match them. It's the kind of destructive price war Lorenzo could tell both carriers all about.

By Hal Bernton in Anchorage, Alaska, and Andrea Rothman in New York

MANAGEMENT

THE UGLY MESS AT WASTE MANAGEMENT

Its 'model' plant clearly wasn't, but that's about all that's clear

The folks at Waste Management Inc. used to love showing off their Chicago incinerator as a model for safe disposal of hazardous waste. Operated by WMI's Chemical Waste Management Inc. subsidiary, the nation's largest commercial incinerator was so technologically advanced that it was then one of only three facilities in the U.S. permitted to burn cancer-causing PCBs. Busloads of analysts, customers, and even schoolchildren regularly toured the plant, located just an hour away from WMI's Oak Brook (Ill.) headquarters.

That pride now seems badly misplaced. The past few years have brought a disturbing series of allegations and documented instances of management, environmental, and worker-safety problems at the Chicago incinerator (table). In January, state officials launched an investigation into possible criminal misconduct there. And a state grand jury has convened to hear evidence of deliberate mislabeling of up to 100 barrels of hazardous waste by a supervisor, according to lawyers involved in the case. In late March, Chemical Waste Management (CWM) said it would suspend operations at the incinerator and told most employees they would be laid off in May.

TELLING PATTERN? In the past, WMI Chairman Dean L. Buntrock—who until seven months ago was also chairman of CWM—has blamed WMI's many regulatory run-ins on managers left over from companies it acquired. WMI gained control of the Chicago plant in 1984, when it bought SCA Services Inc. But problems continued even after its old management was tossed out in 1988. Some local officials believe the trouble lies in WMI's executive suite. "When you see this kind of pattern [of problems], it tells me that these kinds of things are approved by top-

level management," says State Representative Clem Balanoff, a company opponent whose 35th District includes the plant. The plant's managers, as well as top CMW and WMI officials, declined to be interviewed. But WMI spokesman William J. Plunkett denies that company officials have ever approved any questionable or criminal activities.

How could things have come to this? Waste Management's showcase plant. Interviews with a dozen current and former incinerator employees and an extensive review of public records and private documents suggest some possible causes: The decentralized management style of the \$7.5 billion parent company and its \$1.4 billion subsidiary seems to have contributed to the troubles, as does the pressure that headquarters put on plant managers to achieve high profits.

Whatever the cause, the incinerator



ms were not isolated incidents. Company is also the target of an ongoing federal criminal investigation alleging violations of procurement and environmental regulations at a U.S. Corps of Engineers site. Now, the company's ability to expand its high-margin incinerator business will depend on whether it can assure customers that it can comply with environmental laws.

Concerns about the company's record of delay or block plans for new projects. Already, the issue has slowed an attempt to build a nuclear-waste incinerator plant in Martinsville, Ill., where regulators have demanded all of WMI's internal memos on the Chicago problems. The state of Indiana reviews CWM's application to expand a hazardous-waste site, and the state is taking the extreme step of requiring CWM to make CWM list all major civil and administrative complaints, as well as any other complaints, over the past five years. Depending on what it finds, Indiana may deny the application based on "character." Since many other states have similar provisions, this could become a nettlesome issue for WMI.

There's little doubt that the Chicago incinerator's troubles have helped drag down profits at both CWM and its 76% parent, WMI. In 1991, CWM's profits fell 42.6%, to \$100.8 million. It was its earnings decline since WMI spun off the plant to the public in 1986. The Chicago

AN EX-WORKER SAYS THAT WHILE RAKING SLUDGE, 'MY HANDS STARTED BUBBLING'

plant has generated no revenue since a major explosion 13 months ago, and it has spent several million dollars on test runs to meet regulatory requirements. Parent WMI's profits fell 11.5% last year, to \$606.3 million.

The trouble in Chicago began in 1987, when shift supervisor Jack F. Tursman was fired for alleged mishandling of a spill. Tursman, who is pursuing a wrongful-discharge suit against the company, claims his dismissal was in retaliation for alerting the parent company to possible crimes at the plant.

Tursman says he began biweekly meetings in May, 1987, with David M. Blomberg to discuss problems at the plant. A member of his church and the retired assistant to Chairman Buntrock, Blomberg assured him that an internal investigation was under way, Tursman says. But it was only after he was fired and then threatened to go public that any changes were made, he alleges. Says Blomberg, who was then a consultant to the company: "I did meet with Jack at a local restaurant. That's true. But I just don't want to say any more."

Tursman's allegations are chilling. Under the direction of former operations manager Riad "Ray" Alkhatib, Tursman says he was ordered to "burn as much as possible." To avoid detection, Tursman says Alkhatib told control-room employees to disconnect pollution-monitoring devices. Gary Gregolini, the chief control-room operator during this period, agrees with Tursman's account. Alkhatib, whom CWM says it fired in 1988, could not be located for comment.

In settling Environmental Protection Agency charges stemming from Tursman's allegations, CWM told regulators that pollution gauges had been turned off four times in 1986 and 1987 and that excess PCB waste was fed into the kiln at least once. But the company denied that the actions were condoned by managers.

According to some ex-employees, the pressure to produce profits was intense. Says one of the plant's former top managers: "The attitude was: 'I don't want to know how you do it. Just keep turning in the results.'" CWM's fast growth throughout the 1980s and its decentralized management structure, with each facility operating as its own profit center, may have also contributed to a climate where such problems could occur. There was so much turnover at the plant and corporate level, for instance, that a common joke among employees went: "If the boss calls, get his name."

Saving money was paramount, say ex-employees. Sometimes they were even forced to skimp on such items as gloves and respirators. "It was a money factor," says Gregolini. "Corporate said we were using too much equipment." Akhil G. Desai, a former process-water technician at the plant, says he suffered severe reactions while raking chemical-laden sludge: "All of a sudden, my hands started bubbling." Desai says he suggested ways to avoid contact with the sludge, such as shaking it in a mechanical hopper, but plant managers rejected his ideas because of cost. Plunkett says the company never knowingly compromised safety for profits or cost savings.

TOXIC FUMES. CWM tried to clean house in the wake of Tursman's charges, bringing in new plant management and spending millions on safety features in 1988. It wasn't enough. Just after midnight on Feb. 13, 1991, an explosion rocked the incinerator, releasing toxic fumes. Workers, unsure of what they were handling, had fed a packet containing the explosive tetrazole into the kiln. Almost a year later, after agreeing to \$3.5 million in fines over the incident without admitting any wrongdoing, CWM had more bad news: It revealed that an employee had placed phony labels on barrels of waste to keep regulators from discovering them. The employee, since dismissed, says that he mislabeled nothing and was fired for whistleblowing.

WMI's Plunkett denies that the mislabeling was directed or condoned by company officials. He adds that CWM told the state of the mislabeling, as required, and is cooperating with the investigation. "Any inquiry will show that the company acted responsibly," he says.

The state isn't so sure about that. "We have serious concerns about the ability of that facility with current personnel to operate in compliance with environmental laws," says Matthew J. Dunn, environmental control chief at the Illinois Attorney General's office. He adds: "We'll go as high as we can" to prosecute wrongdoers. For CWM and WMI managers, that is only the latest in a long string of very bad news.

By Julia Flynn in Chicago

A TRAIL OF TROUBLE AT AN INCINERATOR

1988 Chemical Waste Management concedes to regulators that pollution-control equipment was deliberately shut off at its Chicago incinerator by plant operators at least four times. In addition, it acknowledges that cancer-causing wastes were fed into the incinerator at rates higher than the plant's permit allowed.

May, 1991 A container of chemicals explodes in the incinerator's kiln. CWM later pays \$3.5 million to settle EPA charges in connection with the explosion, without admitting wrongdoing.

May, 1992 CWM reveals that a key supervisor at the incinerator put phony labels on 100 barrels of toxic waste to evade safety regulations. The company also acknowledges that two data files were kept on the inventory. The Illinois Attorney General and the state attorney general launch a criminal prosecution on behalf of the EPA.

1992 CWM says it will suspend operations and tells most incinerator employees they are being laid off in May.

DATA: COURT DOCUMENTS, BW



CHAIRMAN JONES AND CEREMONIES ANNOUNCING AMEX' EMERGING COMPANY MARKETPLACE



THE AMEX: A QUESTIONABLE SEAL OF APPROVAL

Did it adequately investigate the penny stocks it is now listing?

To old-timers on Wall Street, the American Stock Exchange is the "Curb"—a throwback to the horse-and-buggy era, when Amex traders bought and sold stocks outdoors. But over the years, the Amex has come light-years from its open-air origins, achieving a reputation for innovation that has been reinforced under its aggressive but folksy chairman, James R. Jones. The Amex has been a pioneer in options and new financial instruments. But the former Washington heavy-weight has been unable to reverse a somber trend: When it comes to another Amex franchise, secondary stocks, the exchange is left in the dust by the NASDAQ over-the-counter market.

Well, the Amex is fighting back. On Mar. 18, the exchange inaugurated with much fanfare an Emerging Company Marketplace of 23 small companies. The

ECM companies are tiny "penny stocks," \$30 million in average market cap, but top-heavy with high-tech innovators in fields that range from cancer therapy (Epigen Inc.) to air-cooled krypton lasers (Ion Laser Technology Inc.) (table). The companies were handpicked by a "blue-ribbon committee" of Amex members and money managers, and screened for quality as well as financial soundness. Securities & Exchange Commission filings were scrutinized, Amex staffers insist, to weed out companies infected with the malady that has plagued the penny-stock arena—regulatory troubles.

TRACK RECORD. The result, the Amex boasted in one ad, is an amalgamation of "some of the best companies in the country." Or as Jones puts it: "We want [ECM] to be a prestige place to start"—an "incubator" for companies on the way up. Jones bristles at criticism of the ECM

for including some companies that originated as "blind pools"—shell companies that are frequently subject to manipulation by penny-stock promoters. "That's an unfair swipe at some very distinguished people who served on the [blue-ribbon] committee," says Jones. And three committee members who would speak for the record—Bankers Trust senior Vice-President William J. Newman, Prudential Securities Inc. Managing Director Alexander C. Schwartz Jr., and Beekman Capital Management President Nedim Hamarat—say the panel weeded out dubious companies. "Where there was prior wrongdoing by any principals of the listed companies," says Schwartz, "the panel in almost all cases took an extremely negative view and disqualified the company."

"Almost all"? Were any companies with regulatory problems allowed to stay

ECM? The answer is yes. And that questions that go to the heart of new Amex marketplace, because company stocks are largely sold to fry investors, who are wary of stocks because of past abuses. Examination of public information BUSINESS WEEK indicates that one of M companies recently had significant regulatory troubles that were to the Amex. The chairman of another ECM company has blots on its past that could have been—but were easily uncovered by the Amex: He was expelled from the securities industry in 1974, and false statements concerning his academic background appear in company disclosures.

track record of two little companies would usually be of consequence—except, of course, to their holders. But the story pedigrees of Printron Inc. and Cancer Treatment Holdings Chairman Lawrence Levinson raise interesting questions about the adequacy of Amex company-selection process:

Printron Inc. This Albuquerque (N.M.) company, which is developing an advanced method of making printed circuit boards, is the subject of an ongoing SEC complaint. In a federal complaint against Printron by the SEC, Sept. 26, Printron is charged as owing its existence to a convicted felon and a red New Jersey lawyer named Karl R. Huber Jr. Huber was indicted in 1985 of filing false tax returns,

In 1979, he was found guilty of conspiracy, perjury, mail fraud, racketeering and lying to a government agency. According to the SEC complaint, whose allegations were neither admitted nor denied by the company, it was Huber's idea to take the company public, and he was instrumental in the hiring of Printron CEO Eleanor Schuler and a director, Thomas Beam, who is the company's former chief financial officer and treasurer. The SEC maintains that two companies "associated" with Huber retained in 1987 a 37% stake in Printron, 100 shares, for 7¢ a share, or \$7.00. With Printron shares now trading at the ECM at \$9, that stock is now worth \$1.1 million.

SEC's beef with Printron was not

that Huber was intimately involved with the company—but that his involvement was not disclosed to shareholders. To settle the charges, Schuler and Printron agreed last September to refrain from future violations of SEC reporting requirements. "We were assured by the Amex staff that the issue had been resolved," notes panel member Hamarat.

But Printron's troubles aren't over. The SEC is continuing an inquiry into similar allegations concerning Printron directors Clifford Lloyd and Beam, neither of whom could be reached for comment. Printron corporate secretary Valerie Winters says that settlement talks are under way, and Schuler, who says that she was aware of Huber's criminal record, notes that Huber is no longer

sions of the securities laws in connection with the sale of unregistered stock—in addition to net capital violations by a defunct securities firm headed by Levinson, Quodar Equities Ltd.

Levinson's 1974 troubles did not have to appear in Cancer Treatment documents because they were more than five years old. But the CTI prospectus, filed with the SEC in 1988, was equally notable for what it did contain. It described Levinson as a certified financial planner since 1981 who holds a PhD in pharmacology from Columbia University and a "master's equivalent degree" in pharmacology from the Brooklyn College of Pharmacy—all of which is denied by Columbia, Long Island University (successor to the Brooklyn College of Pharmacy), and the International Board of Standards & Practices for Certified Financial Planners, which says that Levinson was never a CFP.

Recent corporate filings have not repeated—nor retracted—the statements in the 1988 prospectus, but in the 1991 fiscal year annual report, the chairman is described in a photo caption as "Lawrence Levinson, PhD."

Levinson insists that he was a CFP in the mid-1980s and that he earned 41 credits toward a master's. He describes the Columbia PhD notation as a "mistake" and says that he has a mail-order PhD from a now-defunct institution. "I never misrepresented anything," says Levinson. "I have a PhD. Is it a meaningless PhD? Probably." In

any event, Levinson maintains, the question is moot. "People invested in a concept, an idea," he says.

Amex officials say they were unaware of Levinson's background—a history that Schwartz maintains would have disqualified a company from inclusion in the ECM. "Those kinds of things hopefully were screened out by the staff," says Hamarat. But they weren't. And unless the Amex repairs the holes in its screening procedures, the exchange will allow a pall to be cast over the ECM companies that have unblemished records—and may truly be among the "nation's best companies."

By Gary Weiss in New York, Gail DeGeorge in Fort Lauderdale, Fla., and David Greising in Chicago

THE AMEX'S NEW LIST OF EMERGING COMPANIES

ADVANCED PHOTONIX

Light and radiation detection devices

ALTA ENERGY

Oil and gas exploration and development

AMERICAN PACIFIC MINT

Jewelry and bullion products

AUDRE RECOGNITION SYSTEMS

Designs and markets software systems

CANCER TREATMENT HOLDINGS

Radiation therapy centers

COLONIAL DATA TECHNOLOGIES

Telephone caller-identification products

DIGITRAN SYSTEMS

Simulator training systems

EPIGEN

Developing cancer-treatment products

INTERTEL COMMUNICATIONS

Telecommunications services

ION LASER TECHNOLOGY

Medical laser technology

MEDIA LOGIC

Test equipment for disk-drive makers

MEDPHONE

Medical products that use phone lines

NORTH COAST ENERGY

Oil and gas drilling

NORTHERN INSTRUMENTS

Electronic sensing devices

OCEAN OPTIQUE DISTRIBUTORS

Imports and distributes eyeglass frames

PNF INDUSTRIES

Fire-retardant ceramic coating products

PRINTRON

Printed-circuit board technology

PROFESSIONAL DENTAL TECHNOLOGIES

Dental instruments and fluoride products

RANDERS GROUP

Real estate development and construction

THREE-FIVE SYSTEMS

Diodes and liquid-crystal displays

TOP SOURCE

Develops and markets auto technologies

TOPOX

Products for skin disorders

UNIQUE MOBILITY

Developing brushless electric motors

DATA: COMPANY REPORTS

employed by the company. "There were no victims," says Schuler. "No shareholders were harmed." An Amex spokesperson would not comment on Printron, "because of the regulatory nature" of the matter.

■ **Cancer Treatment Holdings Inc.** This Fort Lauderdale (Fla.) company runs radiation-therapy centers, mainly in Florida. Its chairman is Lawrence Levinson, who in 1974 consented to an SEC-obtained court order banning him from the securities industry for life. "I voluntarily turned my license in because I had a net capital violation," says Levinson. "Did I do anything wrong morally or ethically? No." But the SEC alleged, and Levinson neither admitted nor denied, that he "willfully violated" the antifraud provi-

SUDDENLY, THE PASSWORD IS 'VALUE'

Mutual funds that bet on an upturn are rising with the economy

Some 18 months ago, Robert Martorelli watched in amazement as recession-wary mutual-fund managers flocked to supergrowth stocks such as Amgen, The Gap, and Home Depot that could prosper in a sick economy. "We saw incredible values as people threw away stocks that didn't have earnings momentum," says Martorelli, who runs the \$240 million Merrill Lynch Phoenix Fund, which invests in unloved and unwanted companies. So, he selected investments "for the upturn"—and waited. The fund logged a respectable 37% total return in 1991. But that was far behind funds that had loaded up with high-octane growth stocks.

Now, with the economic recovery in hand, Martorelli's patience is paying off. His fund was up 18.69% for the first quarter (through Mar. 27), the best growth fund and fifth-best of some 1,200 equity funds tracked by Morningstar Inc. Now, it's Martorelli and his unglamorous stocks, such as Anacom, National Semiconductor, and Navistar International, that are looking snazzy.

The eclipse of growth stocks by economically sensitive or "value" stocks was the most dramatic shift in a market that, on the surface, looked placid. The Dow was up about 2%, the Standard & Poor's 500-stock index down 2.8%. The average U.S. diversified equity fund nei-

ther made nor lost money. That may disappoint those who piled a record \$14.2 billion into equity funds in the first two months—a figure that could easily reach \$20 billion when March sales are tallied. Investors tend to buy last year's winners, and those who picked 1991's hot growth funds were more disappointed.

The move away from high-growth stocks was evident in the largest funds: Twentieth Century Select Investors, a growth-stock fund, slid 7.29% during the quarter. By contrast, the Windsor Fund, which makes big bets on cyclical companies, delivered a 4.52% return (table). Even more graphic evidence: The quarter's top-performing fund specialized in one of the U.S.'s most cyclical industries. Fidelity Select Automotive Fund (table) jumped nearly 25% on the rally in auto stocks. The fund's assets under management exploded, too, going from \$2.4 million at yearend to \$82 million by the end of March.

ILL HEALTH. Health care funds, previously regarded as the prescription for investment success, took the worst drubbing—an average loss of 10.77% for the quarter. Oppenheimer Global Bio-Tech, which soared 121.1% last year to become the best-performing fund of all, dropped 13.82%. Fidelity's Biotechnology, Health Care, and Medical Delivery sector funds, all among last year's top 20, have taken

ill, too. They're taking up the rear along with the long-suffering Japanese and precious-metals funds.

Compared with the health care fund, the diversified growth-stock funds that led the charge last year just have to sniffles. Of 1991's top 10 growth funds, six are in the red so far this year. Still, the worst of the lot, the Janus Twentieth Century Fund, was down just 7.94% in 1992—hardly a serious stumble after last year's 63.9% climb.

Not all of last year's leaders were dethroned. Financial specialty funds, for instance, are still riding high. In 1991, financial-services companies rallied mightily as interest rates dropped dramatically. Although interest rates are creeping up this year, the financial funds are still eking out gains. That's because investors now figure that banks and thrifts, heavily represented in the funds, have the worst of their losses behind them. Strength in the financial sector is also bolstering more diversified funds with major holdings in financial companies. "Finance stocks are important for us," says Heiko Thieme, manager of the American Heritage Fund, one of the few 1991 leaders that is still leading. His fund reaped about a third of its 16.67% return from financial stocks.

Small-company funds, whirlwinds in 1991, are still making gains. But among funds that invest in small stocks, there was a changing of the guard, too. Again, high-growth has been giving way to value issues with rock-solid fundamentals.

A typical example: Last year's red-hot Montgomery Small Cap Fund, which built a stellar 98.7% return with shredded investments in high-growth emerging companies, is off 5%. Now the leading small-company fund is the more somber Heartland Value Fund, up 19.74%. The Merrill Lynch Phoenix, Heartland kot-

HOW FUND GROUPS FARED

Group	Total* return	Group	Total* return
SPECIALTY-FINANCIAL	6.49%	ASSET ALLOCATION	-1.20
SPECIALTY-MISCELLANEOUS	3.33	BALANCED	-1.25
SMALL COMPANY	2.85	SPECIALTY-NATURAL RESOURCES	-2.20
MAXIMUM GROWTH	1.67	INTERNATIONAL STOCK	-2.30
SPECIALTY-TECHNOLOGY	1.63	SPECIALTY-UTILITIES	-4.34
OPTION ENHANCED	0.86	SPECIALTY-PRECIOUS METALS	-7.88
INCOME	0.40	SPECIALTY-HEALTH CARE	-10.77
EQUITY-INCOME	-0.11	U.S. DIVERSIFIED EQUITY	0.01
GROWTH	-0.61	EQUITY FUNDS	-0.69
GROWTH & INCOME	-0.66	S&P 500 INDEX	-2.78

* Appreciation plus reinvested dividends and capital gains, Jan. 1 through Mar. 27, 1992

HOW THE BIG FUNDS PERFORMED

Fund	Assets** Billions	Total* return
FIDELITY MAGELLAN	\$19.3	-0.50%
INVESTMENT COMPANY OF AMERICA	10.5	-2.18
WASHINGTON MUTUAL INVESTORS	8.2	1.45
WINDSOR	7.8	4.52
FIDELITY PURITAN	5.1	3.10
TWENTIETH CENTURY SELECT INVESTORS	4.6	-7.29
FIDELITY EQUITY-INCOME	4.4	2.66
VANGUARD INDEX 500	4.3	-3.02
AMERICAN MUTUAL	4.3	-1.38
TEMPLETON WORLD	4.2	0.00

** As of Dec. 31, 1991

with its peer group last year, but it broke away from the pack in Jan. Like Phoenix, it invests in companies with good fundamentals that are in favor with investors. They include companies in prosaic businesses, such as parts and small-town banking, which are cheap by most investment standards. Says Heartland portfolio manager William Nasgovitz: "We never had a stock with a p-e greater than 10." **WID.** Not surprisingly, other top-performing funds—Pioneer Capital Growth, Enterprise, and Skyline Special Equities—also practice small-cap value strategies. Even more telling is that two funds, Colonial Small Stock Index, +0.09%, and the DFA U.S. 9-10 Small Company Fund, up 13.89%, are indexes that buy the smallest-capitalization stocks. Last year, they underperformed the average small-company fund; this year, they're beating all but Enterprise. The reason is that most small-cap managers shoot for fast-growing, leading companies. The indexes, on the other hand, include the hundreds of mediocre small companies that are more dependent on the economy for growth. Those stocks, longtime laggards, are now on the make.

Small-cap managers who buy Philip Morris and Exxon Corp. can deploy dollars easily, it's harder for those who invest in small-company stocks. Information about the companies is hard to find, the stocks are often illiquid. That's why the Fidelity Low-Priced Stock Fund, which went from \$200 million in assets to \$10 million in just seven weeks, shut its doors on Mar. 9. "We need time to find that money to work," said Neal Kemp, senior vice-president at Fidelity. Small-company funds that closed in the quarter include Montgomery Cap and Babson Enterprise.

Although the first-quarter performance derby was clearly won by the value, or value-stock, players, the high-stock portfolio managers have tried "uncle." The case for health stocks, for instance, is based on an aging population and new medical technologies, not on the economy. Should the economy prove weak, investors could see the economically sensitive stocks return to reliable growth stocks—the growth funds that soared in recent years will resume their flight. Investors should get an idea of which winds are blowing when comparing first-quarter profits in comebacks. If the cyclical are still not in speed, the value funds' newfound popularity status may be short-lived.

—Jeffrey M. Laderman in New York

BUSINESS WEEK Mutual Fund Scoreboard, published monthly, is available on diskettes by monthly or quarterly subscription. For information, write to P.O. Box 990, Fort Lee, N.J. 07024, or call 1-800-553-3575.

THE BEST AND WORST IN THE FIRST QUARTER

LEADERS

Fund	Total Return*
Fidelity Select Automotive	24.88%
Sherman Dean	22.99
Heartland Value	19.74
G.T. Latin America Growth	19.59
Merrill Lynch Phoenix A	18.69
Pioneer Capital Growth	17.34
American Heritage	16.67
Colonial Small Stock Index	16.09
Merrill Lynch Latin America B	15.41
Prudent Speculator Leveraged	14.75
Fidelity Select Software & Computer	14.21
Fidelity Select Savings & Loan	14.13
DFA U.S. 9-10 Small Company	13.89
Babson Enterprise	13.67
Parnassus	13.47
Oakmark	12.90
Skyline Special Equities	12.79
Fidelity Select Regional Banks	12.73
FAM Value	12.45
Freedom Regional Bank B	12.30
Bull & Bear Special Equities	12.13
Fidelity Select Paper & Forest Prod.	12.12
Fidelity Low-Priced Stock	11.95
Transamerica Capital Appreciation	11.77
Maxus Equity	11.74
FPA Capital	11.67
Fidelity Capital Appreciation	10.70
Quest For Value Small Capitalization	10.43
Regis Small Company	10.27
T. Rowe Price Small-Cap Value	10.22
Shadow Stock	10.19
Kemper Diversified Income	10.16
Kemper Investment Port. Divers. Inc.	10.08
Fidelity Select Construction/Housing	10.07
Fidelity Select Financial Services	9.99
Merrill Lynch Developing Capital Mkt.	9.64
IAI Value	9.61
Gabelli Small Cap Growth	9.42
Neuberger/Berman Genesis	9.34
First Eagle Fund of America	9.28
Gabelli Value	9.28
Evergreen Limited Market	9.26
Fidelity Select Computers	9.25
Gintel Capital Appreciation	9.10
Thomson Opportunity B	9.01
Fidelity Select Retailing	8.79
Prudential Growth Opportunity B	8.78
Franklin Corporate Qualified Dividend	8.50
Acorn	8.35
Fidelity Select Electronics	8.30

LAGGARDS

Fund	Total Return*
Strategic Investments	-23.47%
Strategic Gold/Minerals	-21.94
Vanguard Intl Equity Index Pacific	-18.58
DFA Japanese Small Company	-17.83
G.T. Japan Growth	-16.49
Fidelity Select Biotechnology	-16.47
Japan	-15.15
Oppenheimer Global Bio-Tech	-13.82
United Services Gold Shares	-13.45
Fidelity Select Health Care	-13.00
Putnam Health Sciences	-12.09
NY Life Institutional EAFE Index	-12.04
Nomura Pacific Basin	-11.98
Benham Gold Equities Index	-11.84
PFAMCo International Equity	-11.62
USF&G Axe Core International ADR	-11.62
Investors Research	-11.47
G.T. Global Health Care	-11.46
Financial Strategic Energy	-11.39
Huntington CPI +	-11.18
Financial Strategic Pacific Basin	-10.82
Financial Strategic Health Sciences	-10.72
Blanchard Precious Metals	-10.51
United Science & Energy	-10.25
USAA Mutual Aggressive Growth	-9.58
Van Eck International Investors	-9.57
Alger Small Capitalization	-9.54
Charter Capital Blue Chip Growth	-9.54
Fidelity Select Medical Delivery	-9.40
Fidelity Pacific Basin	-9.28
Retirement Planning Equity	-9.27
IDEX 3	-9.16
Boston Company International	-9.07
Shearson Telecommunications Income	-8.99
State Bond Progress	-8.99
Northeast Investors Growth	-8.87
Dreyfus Growth Opportunity	-8.67
Rushmore Nova	-8.64
Fidelity Select Energy	-8.49
Merrill Lynch Pacific A	-8.48
Financial Strategic Gold	-8.45
New England Growth	-8.40
Fidelity Select American Gold	-8.38
Financial International Growth	-8.27
Lexington Technical Strategy	-8.26
Fidelity Select Precious Metals/Min.	-8.22
Shearson International	-8.18
Lexington Goldfund	-8.12
Scudder Gold	-8.09
Janus Twenty	-7.94



BY GENE G. MARCIAL

FIRST CHICAGO: A BANK YOU CAN BANK ON?

When money manager Ed Walczak buys into a bank, big investors take heed. As the chief investment officer in the U.S. of a Swiss bank, Vontobel, with assets of \$17 billion, Walczak has an expert's eye. So when he recently started buying shares of First Chicago at 28, a number of money managers unhesitatingly followed suit.

Walczak hasn't been too impressed with New York money-center banks, although their shares have staged a sharp comeback this year. He suspects many still face big financial problems. But First Chicago, parent of First National Bank of Chicago, the nation's 11th-largest bank, "has the makings of becoming a big winner," says Walczak.

ASSET-RICH. Apart from having a strong balance sheet and undervalued hidden assets, First Chicago is a compelling takeover target in an industry that's still in the process of consolidation, argues Walczak. First Chicago has total assets of \$50 billion. The bulk of earnings comes from its American National Bank, a "superregional" consisting of a \$7 billion credit-card operation and a branch system with more than 100 locations in greater Chicago.

Analyst Chris Kotowski of Oppenheimer, who is also a bull on First Chicago, thinks it's ripe for restructuring. It's "among the most asset-rich companies we cover, and there is little question that the sum of the pieces of the company is worth much more than the current market capitalization of about \$1.9 billion," he says. The company's separable assets alone, including its credit-card operations, venture-capital portfolio, and American National Bank, are worth \$2.1 billion after taxes, or \$20 a share, figures Kotowski.

Walczak agrees that a restructuring is quite likely. He believes the new management, led by Chairman and CEO Richard Thomas, appears committed to a major restructuring following poor 1991 results. He also suspects that in the short term, First Chicago will opt to spin its nonperforming loans into a new company or undertake some kind of merger or acquisition.

Walczak notes that First Chicago's stock is trading at about 77% of its "understated" book value of 35 a

FIRST CHICAGO: ACCRUING GAINS



share. He figures that First Chicago is worth 37 to 44 a share, based on projected earnings of \$4 a share in 1993. Analyst Kotowski expects earnings of \$2.65 a share this year, up from last year's \$1.15.

Whispers are that some foreign banks, including a big Canadian bank, are eyeing First Chicago as a buyout. One big investor believes that Bank of New York, which acquired Irving Trust in 1988, is also interested in First Chicago. A Bank of New York spokesman said the company is always seeking opportunities to expand but wouldn't comment on First Chicago.

TELECONCEPTS MAY REINVENT ITSELF

For a company that posted a loss last year on revenues of only \$2.6 million, TeleConcepts has been riding high of late. Shares of the maker and importer of telephones and telephone devices zoomed on the American Stock Exchange from 1 on Feb. 3 to 2 3/4 on Apr. 1. What gives?

Two things: A new group led by Paul Montle, president of Montle International, bought a controlling interest in TeleConcepts, and the company is said to be poised to acquire a company called Thermascan. TeleConcepts will then spin off to shareholders its telephone business and take on a new name, Viral Testing Systems, whose stock will still be traded on the Amex.

So what's so hot about Thermascan? The company, says Montle, has the exclusive license to market in the U.S. Fluorognost, which, he explains, is an immunofluorescent assay test to detect

human immunodeficiency virus Type commonly called HIV-1, in human serum or plasma. Detlev Baur-Krey, Thermascan chairman and CEO, says the test has been approved by the Food & Drug Administration and will be distributed in late April. He says it is the first "sufficiently sensitive and specific test to be approved by the FDA as both a confirmation and screening test for HIV." The standard test, called Western Blot, takes 12 to 24 hours to process, says Baur-Krey. Fluorognost takes 90 minutes and can be performed in a doctor's office, he says. Baur-Krey claims an accuracy of 99%.

Dr. Sharon Geyer, who headed the FDA's review panel for the test, said studies showed that the sensitivity of the Fluorognost test was equivalent to those of the Western blot and the standard ELISA blood-screening test.

SCURRYING ABOARD A TANKER COMPANY

Weak demand for tankers and the rising cost of insurance and ship maintenance have crimped earnings of bulk shippers. I wonder the stock of OMI, which operates 43 U.S. and international-flag bulk vessels, has sunk to 6 a share from nearly 12 last year. Earnings are expected to drop to 60¢ this year from 92¢ last year. Next year won't be so bad, but earnings are still expected to be lower than 1991's net.

Yet several big fund managers are snapping up OMI shares. Here's why: One investor believes that OMI's current slump presents "a classic case of buying opportunity in the stock" which he believes is worth 13 to 14 a share, based in part on the company's liquidation value. Analyst Jim Dowling of Furman Selz, a New York securities firm, says OMI has undergone "a dramatic transformation." He notes that under CEO Jack Goldstein's stewardship, OMI has markedly improved its balance sheet, significantly expanded its fleet, including tankers, and signed new joint ventures with reputable foreign and U.S. shippers. Through subsidiaries and direct ownership, OMI controls 22 international vessels.

OMI plans to split the company into separate domestic and international companies and then sell either 51% of the foreign company to another company or sell a part of it to the public. One investor, who expects the split to occur this year, believes such a move will boost OMI's stock.

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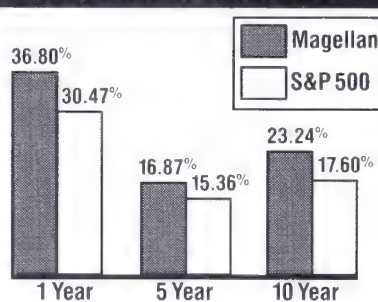
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ROME TO BONN VIA NEW JERSEY

A gnat called IDT is biting monopolies overseas

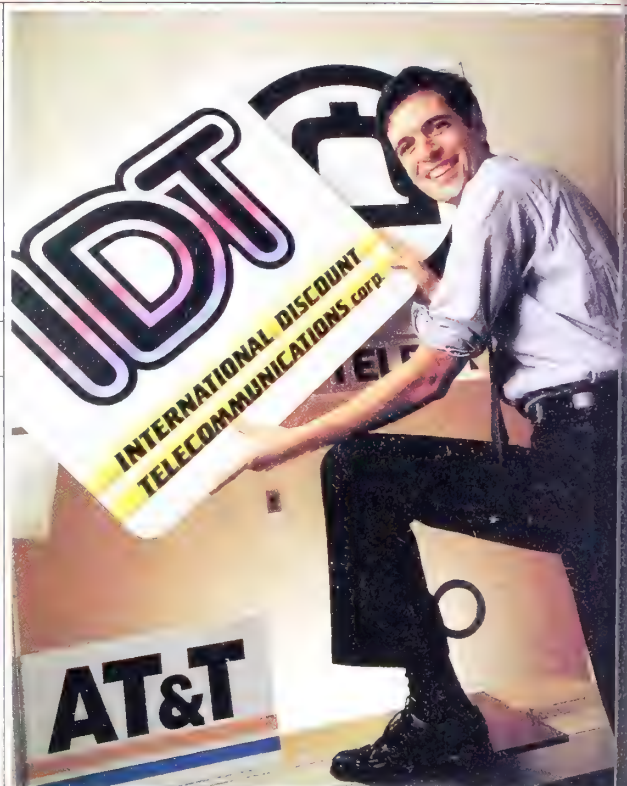
A visit to the headquarters of Howard S. Jonas' discount telephone company doesn't inspire awe. It's in a former funeral home in the East Bronx, upstairs where the mortician's family lived. Thread your way between the mismatched metal desks, wires, and personal computers, and you can find Jonas' high school debating team trophies.

Don't be deceived by the low-budget digs. Jonas' International Discount Telecommunications Corp. may be tiny, but it has earned renown—make that notoriety—in the global long-distance business. Just look at his clippings from European newspapers. The German and Norwegian authorities are deeply concerned about him. In Spain, the state-owned phone company, Telefónica, denounces his company's discount strategy. And in France, where Jonas' reps told executives how to save money by skirting France Telecom's monopoly, a headline in one newspaper blares: "The minister of the PTT is furious!"

FREE-FOR-ALL. Jonas, a 35-year-old father of five who also publishes hotel brochures, is throwing a harsh spotlight on something that foreign phone monopolies would rather leave in the dark. State-owned phone companies in some parts of the world—Italy, for example—charge three times as much for a U.S.-bound call as U.S. carriers such as AT&T, MCI, and Sprint charge for going the other way. That hurts companies that do business around the globe. For \$250 a month, IDT lets customers connect calls from overseas as if they originated in the U.S. You can dial an IDT machine in the U.S., hang up, and wait for it to call back a preset number. Then, you instruct it via your phone keypad to place a call. A Peruvian could use IDT to call Texas—or Ecuador.

IDT is just one force in the free-for-all developing in international calling. On transatlantic routes, multinationals are learning to play carriers off against one another to get the best deal. Fiber-optic lines beneath the oceans have produced a glut of cheap calling capacity, and computer-controlled switches make it easy to route calls via the least expensive route, even if it adds thousands of miles to the journey. Finally, many governments are beginning to promote lower rates, recognizing that cheap international communication is good for trade and growth.

The Federal Communications Commission is leading the push—and for good reason. Americans make the most international calls, about \$7.8 billion worth in 1990. Under Chairman Alfred C. Sikes, the agency has sought reductions in the fees that phone companies charge each other for completing calls. In February, the FCC won tentative agreement from an International Telecommunication



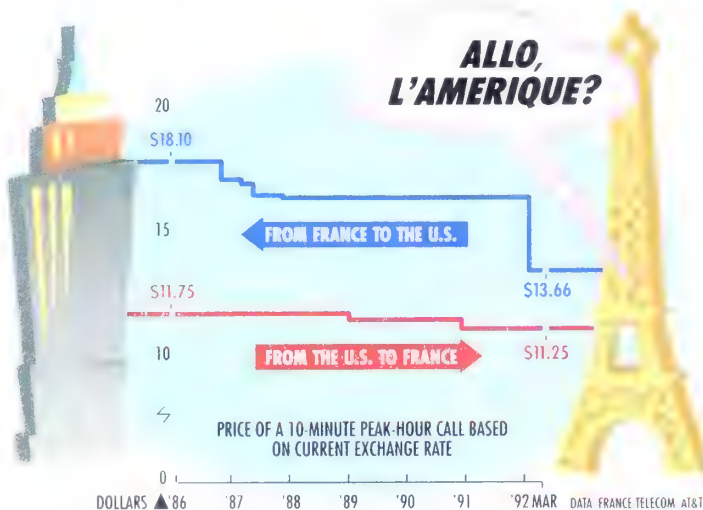
IDC'S JONAS: ROUTING CALLS THROUGH THE U.S. SLASHES RATES

Union working party—representing phone regulators from 31 countries—that the fees should be reduced toward true cost within five years.

SELLING LINES. And last December, the FCC took steps to open up a potentially powerful form of competition. It said that companies such as multinational banks and oil companies that use leased lines for their internal communications should be permitted to resell their excess communications capacity to other companies. Since leased lines are cheaper than standard international service, customers presumably would flock to these resellers. The lines would work

like a giant, two-way pipeline, diverting overseas calls from the regular phone network, says Leonard Elfenbein, president of Lynx Technologies Inc., a telecommunications consulting firm. Foreign carriers would soon be forced to lower their standard rates to keep customers.

Rates aren't in free-fall to be sure. Some companies already quietly offer the leased-line resale at the FCC favors, but it's officially permitted only between the U.S. and Canada—and the Canadians use it heavily. British authorities



say they plan to go along with the plan, but not until the FCC eases on British phone companies doing business in the U.S.

Foreign carriers are reluctant to cut too quickly because they depend on the cash cow of international distance. In developing countries, profits help subsidize the post office and other vital government services. In industrialized nations, they help down the price of domestic calling. Cory C. Staple, a Washington lawyer who does research for the International Union of Communications, a London-think tank, estimates that gross margins from international long distance may run from 33% to 50%. Says Staple: "It's in nobody's interest to drive margins too far."

GOING FAST. But the market is forcing changes, and phone companies may begin feeling the pinch. When France Telecom lowered international rates 13% to 18% this year, it said it had to make up the loss by raising domestic rates. Within a few years, that kind of move might not be easy, however. The Commission of the European Communities is investigating a plan that would end telephone monopolies and open up competition in domestic voice communications throughout the EC. Forced to keep a lid on domestic rates, phone companies would lose flexibility in cutting international rates.

It's O.K. with Howard Jonas. His business plan hinges on only gradual reforms in pricing by the overseas phone companies. When France Telecom cut rates so deeply this winter, IDT got out of the French market because the profit edge had become too slim. Recognizing that his window of opportunity was closing, Jonas wants to get established well enough abroad that when new forms of competition such as on-line resale come about, he'll have a network in place to offer them.

Now, at least, business seems good. While Jonas won't discuss IDT's profits, he says he expects to turn profitable by the summer. To accommodate his growth, he's installing hundreds of his phones in a 16,000-square-foot building in Hackensack, N.J., that used to be owned by a company with a slightly different heritage: American Telephone & Telegraph Co. To the FCC's Sikes, the success of IDT's somewhat kludgy proffor bypassing foreign carriers is volumes about the state of the industry. "People will do a lot of things to avoid exorbitant rates," says Sikes. "In the end, it seems, making their global connections through Hackensack."

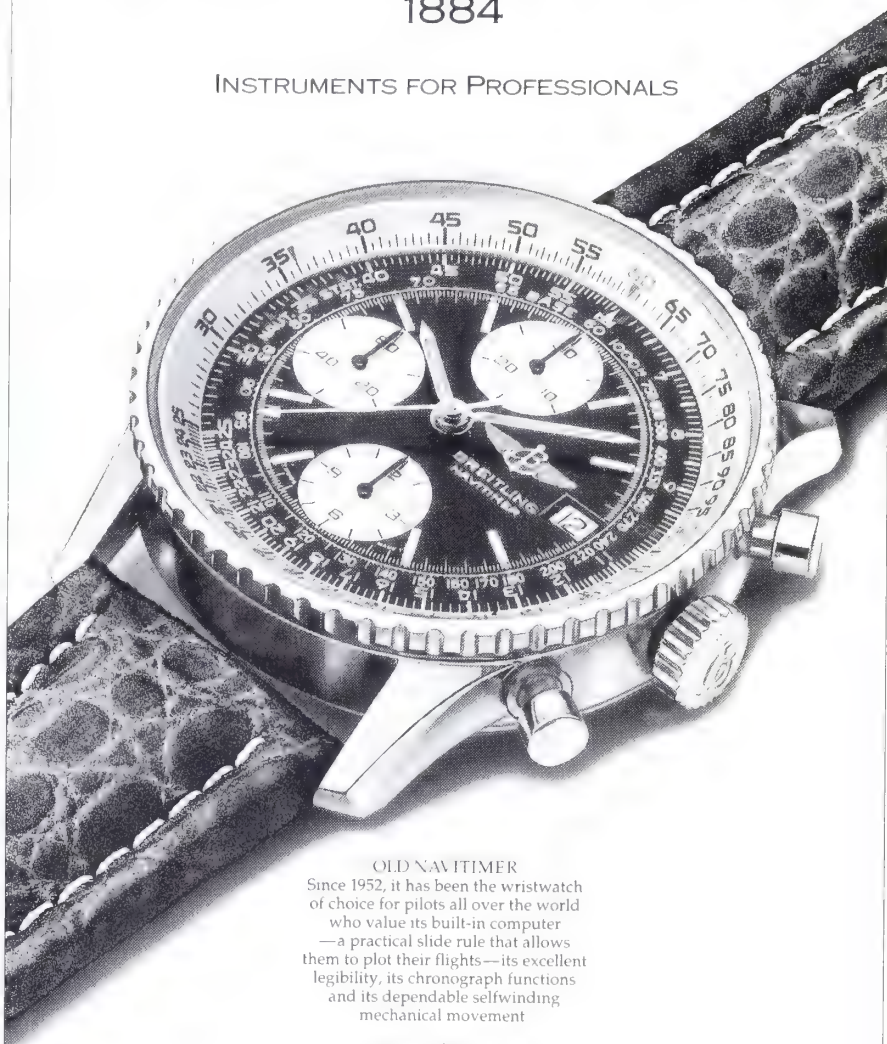
Peter Coy in the Bronx, N.Y., with Lewyn in Washington and Charles in Paris



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DEC STILL YEARNs TO BE A SOFTWARE KING

But using Microsoft to energize software profits could backfire

Two years ago, watching its hardware profits sag, Digital Equipment Corp. decided to push hard into the software business. Like IBM, Digital Equipment craved the fat margins available from software products. While hardware was fast becoming a commodity-like product, the opportunities for creating distinctive software—and charging premium prices for it—seemed almost limitless. And DEC's long experience in networking software gave it a set of programs that could have industrywide appeal—if they could be adapted to work on different machines and marketed successfully.

But so far, DEC's software push hasn't paid off. Undermined by slow development and shaky alliances, the software business has produced none of the gains in revenues and profits that DEC anticipated. In the fiscal year ending June 27, software sales will barely rise above last year's \$750 million, far short of the \$1 billion goal DEC set for itself.

'TECH-ECTOMY.' With its internal efforts stalled, the \$14 billion Maynard (Mass.) minicomputer company is counting on a new strategy to kick-start software sales: a risky union with Microsoft Corp. Software industry executives warn that Microsoft, the dominant force in personal-computer software, would get much more out of the liaison than DEC would. DEC, chides Lotus Development Chief Executive Jim P. Manzi, will suffer a "tech-ectomy"—a one-way transfer of its software technology to Microsoft.

A combination of bad luck and tactical errors has kept DEC's original software plan from jelling. A consortium with other hardware makers that would have seeded the market with machines capable of running DEC's software has splintered. At the same time, DEC has been late in bringing key programs to market.

Worse, in an industry where politics mean as much as good technology, the company's left hand doesn't seem to know what its right is doing. While one DEC group has been trying to persuade makers of PC programs to license some basic DEC technology, another has been

marketing applications programs that compete with those same companies' products. And in March, DEC risked the wrath of PC software resellers by bidding for 800-Software Inc., a \$77 million distributor of PC packages. Now, David L. Stone, vice-president for software business, has been assigned to rationalize DEC's scattered software efforts.

The strategy wasn't always such a muddle. At first, DEC planned to stick clear of applications programs—banking packages, for instance—so it wouldn't alienate other applications developers, whose programs DEC still needs for its machines. Instead, DEC planned to concentrate on systems software—the programs in the bowels of computers and networks that perform technical functions such as sending electronic mail or searching data bases.

DEC hoped it could take some of the systems software that made its own computers work so well in the networks and sell it to other computer software makers. The goal, says Stone, was to adapt DEC software to other brands of computers and collect royalties.

Yet today, DEC can count only a handful of such translations. Microsoft has adopted DEC's design for joining text, graphics, and images into a single "compound" document, but only as an option

one of its programs. One of DEC's last shots at creating standards would have been within the Open Software Foundation (OSF), an industry group DEC helped found. DEC got the OSF to promote a way of identifying computers on a network but failed to create products that met its own standard. "We screwed up because we didn't get the technology to market first," says Stone. DEC also switched its attention from workstations to PCs, he says.

SHAKY GROUP. Part of its thrust into the market was through an industry consortium that intended to set a new computing standard. In 1991, DEC led a group of some 20 computer makers to form the Advanced Computing Environment initiative. DEC helped draw up plans for a machine that ACE members could produce in a variety of models that would all run the same software. The idea was to foster a huge market of clones that would supplant the IBM as the industry's standard computer.



A HARD DRIVE INTO SOFTWARE

In an attempt to become a big player in the packaged-software business, DEC in recent months has made a wide range of software deals

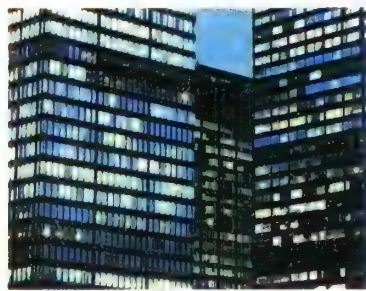
MICROSOFT An alliance with the PC software giant may let DEC's forthcoming Alpha computers run popular Windows programs written for PCs

PHILIPS With the acquisition of the Dutch giant's computer business last year, DEC obtained several PC packages and 400 software engineers

EA SYSTEMS DEC bought 80% of this maker of manufacturing software in 1991

800-SOFTWARE The acquisition of this \$77 million PC-software distributor gives DEC a way to sell microcomputer software in great volume

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year later, though, ACE seems shakier. MIPS Computer Systems Inc., whose chip design is a key part of the standard, is being acquired by workstation maker Silicon Graphics Inc. Without a "neutral" chip design, ACE may not hold.

Meanwhile, DEC's loosely structured management led to a flip-flop on its applications policy. Its maverick group, under Vice-President John Rose, began producing word-processing and other programs that compete with packages from Lotus Development, Microsoft, and Symantec. He also initiated the acquisition of 800-Software, which is responsible for a large portion of the sales to corporations and the government. Now, responsibility for the PC operation is getting reassigned as part of DEC's on-going re-organization. Rose left DEC abruptly in March to start his own computer company.

'NATURAL SYNERGY.' All of which brings DEC to Microsoft's door. Ch. Conneighton, vice-president for office information systems at consultant Gartner Group Inc., praises the pair's "natural synergy": One is strong in desktop software, the other in networking and systems management. "I expect to see the companies selling each others' software and doing a technology exchange," Conneighton says. DEC already has decided to adopt Microsoft's Windows NT operating system, which is now being created for IBM compatible PCs, to run on DEC Alpha computers, due out next year. That would let Alpha customers run many of the programs that PC software writers are working on for NT. In addition, Microsoft is expected to incorporate some of DEC's networking technology in NT, which is due out late this year.

But the Microsoft linkup gives reason for pause. The software giant had not public splits with IBM and Hewlett-Packard Co. Both companies tapped Microsoft to develop software components but found Microsoft competing head-on with them. Despite DEC's use of NT, it's not yet clear whether Microsoft will adapt its NT applications programs to run on Alpha machines.

Microsoft Executive Vice-President Mike Maples dismisses such talk, noting that Microsoft is hammering out a "sweeping" set of agreements with IBM. One promising area for collaboration is "groupware" programs that help workers cooperate across networks. DEC already sells a groupware package called TeamLinks, which competes with Lotus Notes package. "DEC has quite a lot there, and so do we," says Maples. "They can put it together, DEC may finally realize some of its software ambitions."

By Gary McWilliams in Boston

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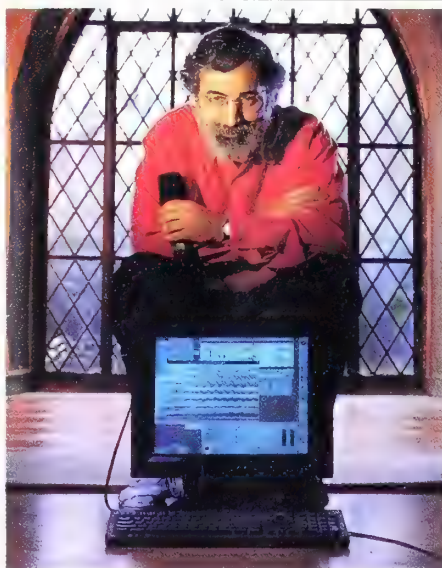
PUTTING A CONCERT HALL ON A CHIP

Now cheap and flexible, DSP chips are popping up everywhere

Anthony M. Agnello's favorite concert seat is front and center at Carnegie Hall's Weill Recital Hall. He doesn't get there often, however, so the 42-year-old musician-turned-entrepreneur has brought the auditorium home—by outfitting his stereo with a black box containing a digital signal processor chip. The chip manipulates the digital codes on compact disks the way a computer massages data. By inserting delays and echoes into the music, it can recreate the "acoustic signature" of up to 99 concert halls. So the strains of Yo Yo Ma's cello sound just as sweet at Agnello's home as they do from his Weill Hall perch.

Once considered exotic, DSP is bursting out all over. Among its hot markets are videophones and multimedia computers that handle video and sound plus data. Agnello's office PC at Ariel Corp., the Highland Park (N.J.) computer company he founded, produces voice messages from electronic mail sent by anyone with a similarly equipped PC. And cellular phonemakers are designing the chips into upscale phones due this summer. At two chips per phone, Motorola Inc. says its DSP sales will jump 50% this year, to about \$70 million.

As recently as 1988, DSP chips weren't feasible for such uses. They cost \$500 and up and were hard to program. Since then, better chip design and production improvements have cut prices to as low as \$3. And computerized techniques have made programming a relative snap. So now, contenders are mounting the first serious challenge to Texas Instru-



AGNELLO'S PCs TURN E-MAIL INTO VOICE MAIL

ments Inc., the market leader. Motorola, AT&T Microelectronics, Analog Devices, Intel, and others are after TI's 57% market share in programmable DSPs, the fastest-growing and most lucrative part of the DSP market. These chips—like the one in Agnello's stereo—can do multiple chores or even be reprogrammed on the fly. Their sales should jump 39% this year, to \$548 million, according to Forward Concepts Co., a market researcher in Tempe, Ariz.

DSP chips are in vogue because of their speed. They are designed specifically to transform such sensory signals as sounds and pressures from an analog wave into a stream of digital bits. And

they do it without the microsecond delays ordinary microprocessors need. A good illustration comes from Detroit, where engineers are working on "active suspension" systems. Say a car hits a bump at 55 miles per hour. Before the tire finishes rebounding from the bump, a DSP chip gauges the force of the impact and lifts the wheel to minimize bounce, then tweaks the shocks to absorb more of the remaining jolt.

In the past, such swiftness required the software to be burned into the chip, restricting each DSP design to one, large-volume use. These "hardwired" DSPs precisely regulate the spin of computer disk drives, for example, and process signals inside modems. Such jobs will account for two-thirds of the DSP market, estimated at \$1.4 billion this year. NEC Corp., Fujitsu Ltd., and other Japanese chipmakers hold about half the business. But they don't sell many programmable designs, since U.S. companies pioneered DSP algorithms, or mathematical formulas, and the programming tools needed for high-performance software. The upshot: Forward Concepts says the U.S. has 90% of world sales of programmable DSPs.

ANSWERING MACHINES. These chips do a growing number of jobs. Acer America Inc. in San Jose, Calif., is bringing out PCs with DSP chips that can be programmed to turn text into voice mail, fax transmissions, function as digital answering machines, or act as connectors to local-area networks—all for about a day's cost of an ordinary modem. So many PCs already are bought with modems, the rest of these functions will be "essentially free," says Frederick Kiremidjian, vice-president for engineering at Acer. If video becomes part of personal computing, Acer's machines will handle that, too. DSP-outfitted machines "are where the market is headed," adds Kiremidjian.

Cellular-phone companies see lots of DSPs in the future, too. With digital signal processing, 6 to 20 times as many calls can be routed over cellular circuits.

THE NEW MARKETS FOR DIGITAL SIGNAL PROCESSING



MULTIMEDIA

DSP chips give PCs video, stereo-quality sound, and the ability to do fax, modem, and answering-machine chores

CELLULAR TELEPHONES

DSP improves clarity and digitally encodes transmissions to prevent eavesdropping



NOISE SUPPRESSION

Electronic mufflers for vehicles and appliances will use DSP chips to generate mirror-image sounds that cancel out noise

CONCERT HALLS

DSP modifies music to mimic acoustics of concert halls



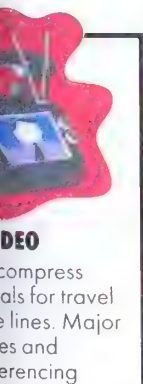
he chips pack the pauses during conversations with digital snippets from other calls. Ericsson GE Mobile Communications Inc.'s latest phones contain TI programmable DSPs to compress, and transmit voice. The digitized signals also guard against eavesdropping and produce sound, similar to the difference in LP records and compact disks. \$600 to \$1,000 each, digital cellular cost only slightly more than the analog models. So cellular companies such as Southwestern Bell Corp. and Caw Cellular Communications have ordered thousands of digital for delivery starting this summer, William R. Osborn, Ericsson GE's chief of subscriber equipment development. And Europe's telecom companies are pushing toward an integrated cellular network.

OFF. DSP chips also are at the heart of more versatile, "tapeless" answering machines. Messages stored on memory can be played back at any speed without distorting the speaker's voice, so recordings can be revved up for impatient listeners or slowed for transcribers. DSPs also figure prominently in the new VideoPhone 2500, which transforms and compresses millions of pieces of video data per second to squeeze picture transmissions onto phone lines. Coming next is video DSP: sharper screens, culled in high-definition TV.

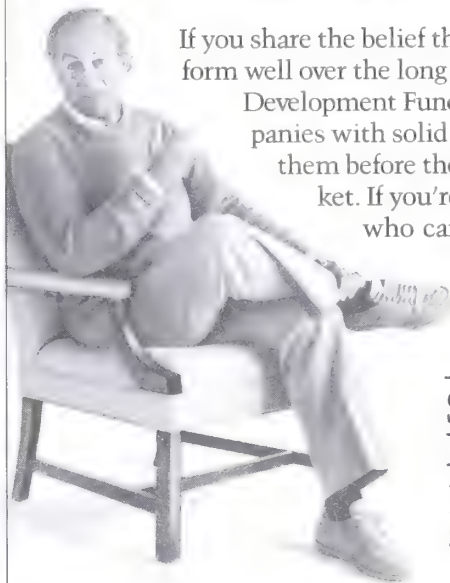
may remake other products, too. Noise & Vibration Technologies Inc. of Phoenix is working with Italy's Fiat to build a muffler-on-a-chip for cars. Noise Cancellation Technologies Inc. of Norford, Conn., hopes to test its electronic muffler this year on a tour bus at Disney World. Both use DSP to analyze the characteristics of engine noise and filter out the most bothersome sounds, such as the whine of a window air conditioner, then create a mirror-image sound waves that cancel out the original noise waves.

Anything slow DSP? Experts say a lot of today's applications may be enabled by ultrafast reduced instruction set computing (RISC) chips, the kind found in power workstations. Even so, says John A. Morse, a senior engineering manager at Digital Equipment Corp., there will be plenty of jobs RISC can't do. So one day, the DSP chip bringing Anthony Agnello the sound of Weill Hall may also deliver an image of Yo Yo Ma on stage.

By Gary McWilliams in Boston



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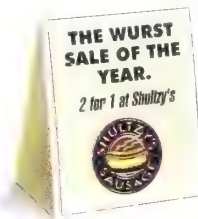
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CERAMIC WOOD THAT'S HARD AS A ROCK



Nature takes millions of years to make petrified wood, the rock-hard material that forms as minerals slowly seep into the wood's cells. Now, University of Washington researchers have mimicked nature to make tough wood-ceramic compounds.

In a process that takes just days, the wood is soaked in a solution containing silicon

compounds, which are widely used to make ceramics. Just as petrification, the solution fills the pores of the wood. Then material is cured in an oven at about 80C. The resulting wood-ceramic compounds are 20% to 120% stronger than wood and less brittle than ceramics, says Daniel Dabbs, research manager of the university's Advanced Ceramic Materials Lab. The composites could be good for structural uses, or for stronger furniture and floors, for example. Dabbs says the ceramic component also makes these materials more resistant to mold, insects, and even salt water.

HELP IS ON THE WAY FROM FORMER SOVIET SCIENTISTS

The breakup of the Soviet Union is having a devastating impact on science there. Top researchers can't work for lack of supplies, and many labs may shut down. "The situation is deteriorating fast," says Marcel Bardon, head of international programs at the National Science Foundation. Western countries and Japan have proposed donating more than \$60 million to help. But it will take months of negotiations to set up an organization to dole out the money effectively.

That's why the NSF has hatched a scheme to provide immediate aid. By early April, it plans to give \$1 million to American scientists who are already involved in joint research projects. Americans will buy supplies—everything from chemical reagents to modems and fax paper—then ship them to their colleagues in Russia and other republics. "This is not a solution to the problem, but it is the one thing that can be done right away," says Bardon. "Psychologically, it will have a big effect. That may help sway Russians who are wondering whether to go to Iraq or Libya."

SMART DENTAL TOOLS: HOW THE DOC CAN ZAP 'EM

Because dental instruments are constantly exposed to blood and saliva, dentists have a strict responsibility to sterilize them. In some cases this is extremely difficult, and in others it can always be done properly. For example, the pressurized steam heat that is now most often used for sterilization can warp plastics or corrode metal on some instruments. And moisture can shorten the life of metal instruments. That raises the question and prompts some dentists to rely on less effective methods of sterilization, says Michael D. Rohrer, associate

dean of the University of Oklahoma's College of Dentistry.

Rohrer and his colleagues have developed a way to sterilize instruments using microwaves. The researchers devised a patented method of rotating and tumbling instruments within a microwave field. That avoids a serious problem—the "cold spots" caused by waves canceling each other out. The technique ensures that all the instruments are completely sterile, Rohrer says. The university is now working on ways to commercialize the invention.

THE CLONERS CLOSE IN ON INTEL'S 486

In yet another challenge to Intel Corp.'s dominance of the microprocessor market, a small Richardson (Tex.) chipmaker is rolling out a family of Intel-compatible chips. Cyrix Corp. says its first offering, the Cx486SLC, mimics Intel's top-of-the-line 486 microprocessor—for \$119 per chip in quantity shipments, or 40% less than Intel's cheapest 486 design. Reportedly, the Cyrix chip will also be marketed by heavy hitters such as Texas Instruments Inc. As its first customer, Cyrix has already lined up Montreal's MicroSlate Inc., which produces so-called pentop computers.

Last summer, Advanced Micro Devices Inc. in Sunnyvale, Calif., launched a clone of Intel's mainstay 386 chip that has captured an estimated 30% of the 386 market. AMD expects to ship its own 486 workalike late this year. Other rivals making or developing similar clones include Chips & Technologies, Meridian Semiconductor, and NexGen Microsystems.

Intel isn't taking this lying down. In a few months it will unveil its next-generation 586, a veritable mainframe on silicon. And to lock in its customers, Intel is speeding up development of that chip's successors and is being unusually candid in outlining future products, including a turn-of-the-century chip dubbed Micro 2000. It would contain upwards of 60 million transistors, or at least 20 times as many as the upcoming 586, and blaze through 2 billion calculations per second—more than all but a few of today's supercomputers can do.

YOU CAN TAKE A 'SMART' CAR TO TOMORROWLAND TODAY

For a fortunate few, a visit to Tomorrowland at Walt Disney World begins at the Orlando airport. Avis Inc. has 100 "smart" cars there, with dashboard navigation screens and a voice-guide called Sven. Punch in a Central Florida destination, and Sven will help get you there, announcing turns in a synthetic Swedish accent. If



there's a traffic jam ahead, Sven will steer you around it.

It's part of a \$12 million "smart highways" program, funded in part by General Motors Corp. and the Federal Highway Administration. Video cameras or other sensors monitor 75,000 intersections and 10,000 miles of road, relaying data to Orlando's Traffic Management Center. A computer there keeps in touch with the smart cars. The technology could usher in a so-called Intelligent Vehicle Highway System that will mean safer roads and shorter commutes for 21st century drivers.



AFTER UNIFICATION, "WE USED ANYTHING WITH WHEELS TO DELIVER PRODUCT"

THE REAL THING IS THUNDERING EASTWARD

Former East Germans are crazy for Coke. Next stop, Poland

How do you find sales reps in a territory that has never had any? That was Horst Müller's predicament. In 1990, the new head of Coca-Cola Co.'s operations in eastern Germany needed a sales force to handle store merchandising, order-taking, and delivery. But even advertising in the papers did no good. Says Müller: "These people come from a culture where selling is a completely foreign idea."

So Müller turned to his 2,100 local employees, many of whom came from the six antiquated eastern German plants Coke had bought from the state. He and his managers from western Germany picked out the most gregarious technicians, factory hands, and clerks, and shipped them to the West for sales training. The result was a team of Coca-Cola zealots hustling for new business. Former administrator Regine Hannemann, for example, landed the account at the mammoth Sports Hall in eastern Berlin. The Hall has a giant Coke sign near the skating rink as well as a dozen vending machines and three cafeterias serving Coca-Cola beverages.

Thanks to such drive, it's easy to find

eastern German fans of this American standby. "Of course, when I want a soda, I drink Coke now," says Monika Moroz, a former librarian and now an art gallery owner in Berlin. "It's a lot better than our old Klub Cola." Excluding west Berlin, Coke sold 74 million cases of its soda last year in its new territory, up from zero before 1990 (chart). It could sell more than 100 million cases this year.

Since 1989, the world's No. 1 soft-drink maker has invested \$450 million in eastern Germany, and some analysts figure the new operation will turn a profit by yearend. Germany is already Coke's largest market in its European Community group, which contributed \$767 million in 1991 operating profits—more than the U.S. market generated.

At this pace, Coca-Cola will smack right into PepsiCo Inc., which for years has held the advantage in most of Eastern Europe and the old Soviet Union. But because Pepsi has been weaker than Coca-Cola in Germany, Coke has used its advantage to carve out a market dangerously close to Pepsi's strongholds in Eastern Europe.

Coke's top brass hesitated before plunging into eastern Germany. True, western German bottlers had handed out samples to easterners when the Berlin Wall fell in November, 1989. But Chairman Robert C. Goizueta and President Donald R. Keough worried that a large and fast push into eastern Germany's decrepit markets would be a logistical nightmare.

Müller and Heinz Weizorek, German division president, successfully argued otherwise. They figured monetary unification would come faster than anyone expected, making business in eastern Germany much easier. They also knew that the Treuhandanstalt, the government agency charged with selling off state-owned businesses, would offer the best tax incentives and investment grants to those who acted fast.

GOING BANANAS. Just as important, "there was enormous pent-up demand for the product," says Ralph H. Cooper, president of Coca-Cola's European Community Group. Before 1989, East Germany's 17 million consumers each year drank 95 soft drinks apiece—nearly as many as their western neighbors, despite the bitter taste of state-produced sodas. And East Germans had been watching Coke commercials on West German TV for years. When East Germans poured across the border in 1990, bananas and Coke were the products they bought most.

Once Keough authorized the move, Müller and Weizorek moved fast. The company helped foot the bill for the unification ceremony at the Brandenburg Gate in the fall of 1990.

In April, 1991, Coca-Cola aired its first commercial on eastern German TV, showing young and old all enjoying Coke. The company managers also set up 8,000 vending machines and fountain services in prime locations, and swiftly ju-

TRINK!

COCA-COLA SALES

■ WESTERN GERMANY
■ EASTERN GERMANY



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rigged a distribution network. "We used anything with wheels to deliver product," says Müller. That included wheezing Trabant autos, now being replaced by 370 trucks.

Coke's dominance of western Europe, where it outsells Pepsi 6 to 1, has helped enormously. Weizorek has consolidated Coke's 105 German bottlers into about 30 today. These efficient factories, along with an ultramodern plant at Dunkirk in France, have satisfied eastern German demand while the 1940s' plants Coke bought were being upgraded.

POLISH PUSH. As such western German grocery chains as Tengelmann expanded eastward, they have taken their orders for Coke with them. And they've supported Coke's Western-style marketing initiatives. The Coke sales force, for example, persuaded these retailers to push less familiar brands such as Diet Coke—Coke Light in Europe—and backed them up with a heavy sampling and promotions campaign. "Low-calorie brands weren't very popular at first," says Regina Monsheimer, manager of the Kauhof store in east Berlin's Alexanderplatz section. "But now, I can't keep enough of them in stock."

Meanwhile, Pepsi is struggling in Ger-

many. The company took control of its independent German bottlers two years ago, but low productivity, poor distribution, and feeble marketing efforts have prompted some major grocery chains to drop Pepsi. German volume dropped from 66 million cases in 1990 to 57 million in 1991. Pepsi has now put a German, Juergen Schlebrowski, a Procter & Gamble Co. veteran, in charge.

For years, East Germans had seen ads for Coke, so they snapped up the soda as soon as they crossed the border

Schlebrowski has won back key retail accounts, such as Tengelmann, but he admits the company has a long way to go. "We tried to do too many things at once when we bought the bottlers," he says. As a result, Pepsi has yet to expand aggressively in the East.

While Pepsi fixes up its German operation, analysts expect Coke will start shipping into Poland from its upgraded

eastern German plants. Coke facilities are being planned for Bulgaria, Romania, Czechoslovakia, and Russia.

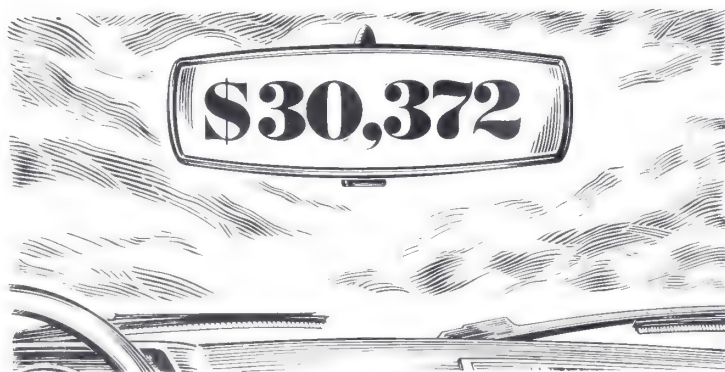
These efforts pale, however, in comparison with Pepsi's franchised network of 65 bottling plants in Eastern Europe and the former Soviet Union. And Pepsi downplays Coke's efforts. "We have a very sound base there, and awareness of Pepsi is higher than any other brand," says Schlebrowski. "It will be difficult to beat us." In the Soviet Union last year, for example, Pepsi sold about 45 million cases, about double Coke's output, according to *Beverage Digest*. Pepsi has earmarked \$1 billion for overseas expansion over the next two years.

Some Coke-watchers expect its superior muscle to triumph in this latest stallment of the cola wars. "What advantage Pepsi may have in eastern Europe from having gotten there first will be easily wiped out by Coke's tremendous global resources," says Gene E. Thompson, an analyst at Prudential Bache Securities Inc. Perhaps, but neither of these rivals ever backs off of a fight with the other, especially in new markets that are to be won.

By Walecia Konrad in Berlin, with Reichlin in Bonn

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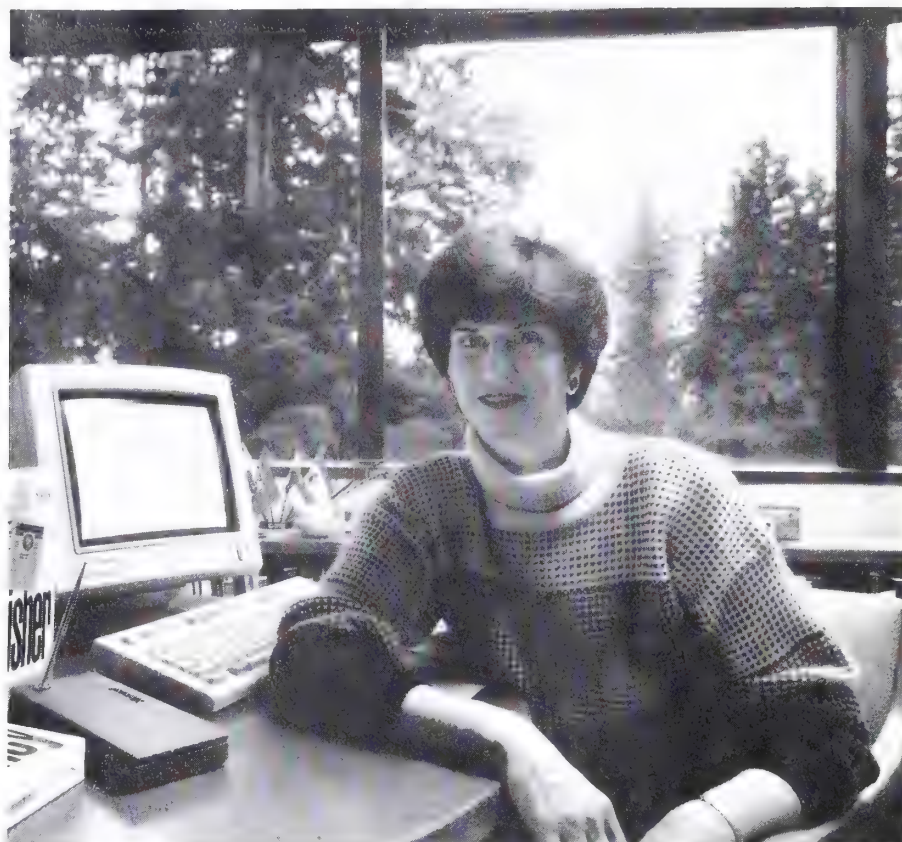
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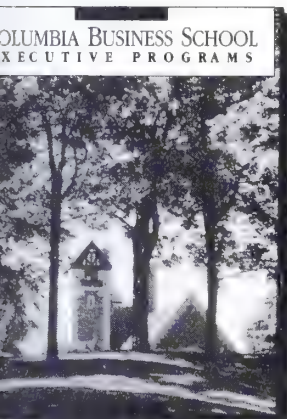


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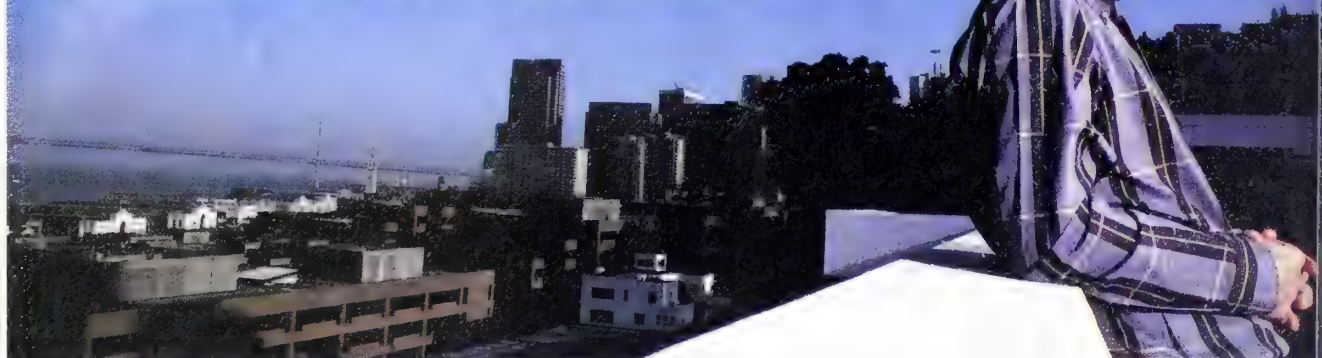
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WHAT'S DEADLIER, A TOXIC WORKPLACE OR LOW PAY?

The OMB is asking that question as it targets costly rules



USC'S KEENEY: HIS "RISK-RISK" STUDIES, WHICH USE DECADES-OLD DATA, ARE THE CONTROVERSIAL UNDERPINNING OF THE AGENCY'S NEW TA

Lewis Carroll is alive and well and working at the Office of Management & Budget. At least that's the view of some economists, labor leaders, and lawmakers, who see shades of *Alice in Wonderland* in the OMB's new assault on regulation. The White House regulatory cops, seemingly turning logic on its head, are now saying that rules to cut toxic emissions in factories may increase worker deaths.

The OMB made its startling suggestion in a Mar. 10 letter that asked the Labor Dept. for additional analysis of new chemical-exposure limits proposed by the Occupational Safety & Health Administration. The OMB wants OSHA to use a novel twist on cost-benefit analysis called "risk-risk analysis." It assumes that higher incomes reduce mortality rates. And, since the money that companies spend to comply with rules comes out of workers' paychecks, rule makers should compare the risk of death from exposure to toxics with the risk of fatalities from reduced earnings. "We want to make sure we are helping more people than we are hurting," OMB regulatory chief James B. MacRae Jr. explained at a Mar. 19 congressional hearing.

Applying that philosophy broadly, as MacRae suggested the OMB might, could defang dozens of federal rules that impose costs on business. In the coming months, the OMB could move against any num-

ber of regulations from agencies ranging from the Environmental Protection Agency to the Food & Drug Administration (table).

The OMB's new course isn't a sure thing: Risk-risk analysis faces both legal and economic scrutiny. Some laws bar agencies from using any form of cost-benefit analysis. And experts say that while the concept may be sound, the data it's based on are dubious.

UNDER REVIEW. But even if risk-risk analysis flops, the OMB seems intent on doing its part to halt the government's regulatory juggernaut. As indicated in January, when the President slapped a 90-day moratorium on new rules and ordered a review that threatens existing ones, the Administration is looking to shore up business and conservative support this election year.

The current flap started in February, when the OMB reviewed a proposed OSHA rule limiting the exposure of some 6 million workers in the construction, maritime, and agriculture industries to lead, asphalt fumes, and hundreds of other

toxic substances. The budget of the OMB vowed to hold up publication of the rule until OSHA considered the effect of projected \$163 million in compliance costs on workers' health. MacRae saw the rule as a chance to apply a technique mentioned in a 1991 decision by the U.S. Court of Appeals in Washington. It came from an article by Ralph L. Keeney, a University of Southern California systems management professor, that supposedly showed that each \$7.5 million in regulatory costs may result in an additional death from lowered incomes.

But the OMB may be overreaching. The U.S. Supreme Court ruled in 1983 that federal law barred OSHA from applying cost-benefit analysis to health rules. MacRae, who declined comment, told Congress that risk-risk analysis is different and therefore permissible.

The OMB may be on firmer ground with other agencies, which are allowed to use cost-benefit analysis. But economists concede that calculating the deadweight costs to companies for compliance with rules, including savings from fewer deaths and increased productivity, is hardly an exact science. Ten times as many indirect costs would involve even more guesswork. The OMB would be "incredibly imprecise," warns John Cogan, a top OMB official in the Reagan Administration.

Worse, although OMB officials say they are

POTENTIAL TARGETS OF 'RISK-RISK ANALYSIS'

OSHA

Proposed rule to set workplace exposure limits for hundreds of toxic substances. **Estimated cost:** \$163 million a year

FDA

Final food labeling rules on the use of such terms as 'light' and 'low-fat' and defining allowable health claims. **Estimated cost:** \$1.5 billion

ENERGY

Feasibility study for construction of an underground storage facility to contain spent nuclear fuel. **Estimated cost:** \$8.7 billion

EPA

Proposed rule to limit toxic emissions from chemical plants to levels achieved by the top 12% plants. **Estimated cost:** \$234 million a year

DATA COURTESY OF AGENCY

studying the risk-risk issue for
s, the \$7.5 million figure MacRae
is wrong. Keeney's figure was
million. And Duke University econ-
W. Kip Viscusi, another expert
y the OMB, says that choosing a
based on one study is "almost like
r a number out of the air."
did MacRae know of a disclaimer
y placed in an earlier draft of his
in *Risk Assessment* that said:
ing! Calculations that follow are
strative purposes only. Any at-
to use the results of these calcula-
o support or oppose a proposed
ion, program, or expenditure is
ely inappropriate."

they ended up using a shorter dis-
but insists his number is a good
etter than those often used in cal-
g health hazards. The effect of
on mortality, he notes, "is not
olated from rats." If the effects
considered, he adds, "some of our
ions may take many lives in at-
g to save a few."

FIGURES. Many economists, includ-
me cited by the OMB, have prob-
y with his approach, however. Jack
, co-director of Georgetown Uni-
s Center for Health Policy Stud-
example, is troubled that Keeney
on 1960 data—a shortcoming
y acknowledges. That was before
es in medical technology and
availability of medical insur-
which may have altered the in-
ortality curve.

ed, while Hadley's own early
suggested that higher incomes
linked to lower death rates, his
research showed the relationship
e more tenuous." He's not sure
t best, argues economist Wayne
f Clark University, it can be hard
whether people are sick because
re poor or poor because they're
adley and others also note that
3 failed to calculate the increased
for workers at companies that
e emission-control equipment.
ould partly offset the costs for
s in the regulated industries.

OMB and Labor, meantime, have
a compromise: The OMB will pro-
SHA's proposal, and Labor will
r the questions the OMB wants
ed. The OMB still has to grapple
olitics, though, and both Demo-
and Republicans are aghast at
k analysis. As Senator James M.
s (R-Vt.) said recently, the OMB
"pull it back and bury it some-
y. Yet even if the OMB retreats, its
ulation war is bound to continue.
s Margaret Seminario, the AFL-
ealth specialist: "They'll be back."

an Crock, with Christina Del Valle,
vington and Michael J. Mandel in
rk

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EDITED BY AMY DUNKIN

Giving

PUTTING CHARITIES UNDER A MAGNIFYING GLASS

With government and corporate contributions in a recessionary tailspin, the nation's charities didn't need a crisis of confidence. But that's what many fear occurred after recent disclosures about the lavish lifestyle and \$463,000 compensation of the president of United Way of America. "When my own mother heard it, she said she wasn't going to give anything to anybody ever again," says Clare Haggarty, a communications officer at the National Anti-Vivisection Society in Chicago.

If you harbor similar thoughts, charity officials hope they'll be fleeting. Many worthy causes have stepped up personal appeals to offset funding cuts. If your heart is large but your budget slight,

it can be a chore to decide which pleas to answer. But there are ways to pinpoint organizations that seem most likely to spend your charity dollars wisely.

Two watchdog groups can provide valuable data:

■ The National Charities In-

formation Bureau (19 Union Square West, New York, N.Y. 10003) keeps tabs on how 300 charities measure up. You can order its *Wise Giving Guide*, as well as detailed reports on any three organizations, at no charge.

■ The Philanthropic Advisory

Service (PAS) of the Council on Better Business Bureaus (Dept. 023, Washington, D.C. 20042-0023) publishes an annual *Charity Index* with information on 200 nonprofit groups. The 160-page booklet is \$9.95. A \$2 bimonthly brochure, *Give but Give Wisely*, tells which organizations have recently drawn the largest number of inquiries and indicates how each conforms to 22 voluntary guidelines.

PAS says nearly one-fourth of the most popular charities fail to meet at least one guideline, such as "fundraising shall be conducted without excessive pressure." But on the most important point, many well-known charities have better records than their watchdog groups require. Two of the major guidelines

HOW HEALTH CHARITIES SPEND YOUR MONEY



that at least half of all collected must go into programs and activities described in solicitations, and that of raising funds can't be more than 35% of donations. A survey of data on the nation's 100 largest organizations shows that on average, they spent 65% of total 1990 income on programs, says *NonProfit Times*, a specialty trade paper.

The average fund-raising expense was 4.4%, but there were wide variations. Habitat for Humanity, which sponsors some housing projects, spent 33% of its income to raise money, and Amnesty International spent 27%. Only 10 organizations out of the 100 surveyed spent more than 10% on fund-raising, and 10 spent less than 1%.

It can be misleading to compare percentages, says David Andrews, executive-president of Planned Parenthood Federation of America. Similar organizations in the same field can have considerable variations (table). Trying to gauge charities in different fields is virtually impossible. Planned Parenthood spent about 74% of \$383 million in 1990 income for program activities and put almost 9% into administration and fund-raising. If the figures are matched against the IRS, say, Lutheran World Relief—which spent 99.6% on programs and 1.3% for fund-raising and administration—the relief group may seem to be more efficient. "But our work is on two fronts—medical and social—is highly labor-intensive," Andrews says.

PERKS. The *NonProfit Times* numbers on United Way of America (not including expenses for the regional offices) show administrative costs consumed 8.8% of \$33 million in 1990 income—but that tells you nothing about the high salary and executive perks of its president, who resigned in March. Digging deeper, you can find plenty from a document released from your state. For example, or so to cover duplications, either the attorney general's office or the charity-registration department will

send you a copy of a charity's Form 990. That's the tax form all nonprofit groups file with the Internal Revenue Service. Just two to four pages long, it shows, among other things, what the charity pays its top executives and consultants.

If you request a charity's Form 990s for a few years back, you can get an idea of whether it is acting responsibly

in tighter times. Does the trend show program expenses going down and executive salaries going up? "If you have any reservations at all on how your dollars are being used, you should write an organization's headquarters and ask questions," says John Huber, executive director of the Lupus Foundation of America. A responsible charity will

respond promptly, he says.

But don't be surprised if the organization pleads austerity. Planned Parenthood laid off 40 people nationwide in 1991, and the Lupus Foundation moved from Washington to lower-rent quarters in Rockville, Md. So, while you get answers, you might also get a question: "Won't you give more?" *Don Dunn*

FOUNDATIONS: THEY'RE NOT JUST FOR ROCKEFELLERS

One way to maximize control over your charitable donations is to set up your own foundation. Far from being an option exclusive to Rockefellers or Carnegies, most of the 30,000 private foundations in the U.S. were started by people with a net worth of less than \$1 million. The tax and legal rules governing private charities are complex but not onerous. And designing your own program can be more rewarding than just writing checks to bigger institutions.

The main difference between public and private foundations is that private charities are normally funded by one individual or family. When you apply to set up

a tax-exempt charitable organization, the Internal Revenue Service conducts various tests to make sure it doesn't qualify as a public charity. Hospitals, schools, libraries, churches, and museums, for example, aren't treated as private foundations.

Most private foundations are nonoperating: Rather than doing their own research or providing direct services, they disburse money to other charities of the founder's choice. Thus, you might make regular grants to a favorite cancer center or animal shelter, or award scholarships or research money directly to individuals.

For many founders, philanthropy dovetails with es-

tate planning. When you endow a private foundation, your taxable estate is cut by the endowment amount. You also get a current income-tax deduction of up to 30% of adjusted gross income. Then, you must disburse at least 5% of the foundation's total assets every year. The foundation's income is subject only to a 1%-to-2% excise tax.

COMMON CAUSE. "But it's more than just tax economics," says Steven Thorne, a regional director of Arthur Andersen's Family Wealth Planning Group in Chicago. For entrepreneurs, establishing a charity can be a rewarding second career. Leon Danco, president of the Family Business Center in Cleveland, believes that running a private foundation is the best way for business owners to ease the trauma of succession once they retire. In wealthy families, private foundations let several generations pursue a common cause while shielding an estate that would otherwise go largely to Uncle Sam.

In drafting the articles for your foundation, filing with the IRS, and drawing up any trust agreements, you'll need a lawyer and an accountant with experience in charitable giving. Up-front costs can be as low as \$1,000 and as high as \$25,000, depending on the size of your assets and the activities you wish to pursue. Before you start, call the Council on Foundations in Washington (202 466-6512) and get *First Steps in Starting a Foundation*. This clear guidebook shows how you can feel like the Rockefellers with just a fraction of their fortune. *Joan Warner*



Autos

INFINITI'S STYLISH NOD TO THE PAST

The most exciting feature of Nissan's new midsize luxury sedan, the Infiniti J30, is its styling. Instead of the high, chopped-off rear deck that has been the aerodynamic standard ever since the Ford Taurus was introduced in 1985, the J30's rear slopes dramatically toward the ground.

It's the way cars used to look, and the vaguely retro J30 evokes the classic lines of a 1961 Jaguar Mark X. At the same time, it is clearly modern, with flush-mounted projector headlamps and integrated, body-colored bumpers.

Infiniti designed the \$33,000 J30 to ply the middle ground between its \$20,000 compact

G20 and the line's flagship Q45, now a pricey \$44,000. Like its stablemates, the J30 is a practical four-door sedan. But its contours trick the eye into believing it's a coupe. That feeling continues inside, with lush walnut surrounding the driver and cozy leather seats that snugly cradle the lower body. Yet lots of glass and ample shoulder room

car's superior ride and stable, surefooted handling. But the necessary drivetrain hump and engine layout mean that the backseat is a tight squeeze for three—or even two—adults. The rear-wheel-drive layout limits the car's cargo space as well.

Nissan borrowed the 3.0-liter V6 engine from its 300ZX sports car for the J30, and it

THE J30: A FOUR-DOOR SEDAN WITH THE FEEL OF A COUPE



open up the top of the car.

If the J30 has a problem, it's that the car is too cozy. Rear-wheel drive, unusual in this class, contributes to the

shows. Refined to reduce noise, the motor still delivers 210 horsepower—more than the Lexus ES 300, Acura Legend, or Mazda 929.

Infiniti believes that luxury car buyers should not be lulled-and-dimed with options: virtually everything, from the sunroof to the compact disc player, comes standard. The only factory option is a \$700 touring package, with a stiffer suspension, four-wheel steering, special alloy wheels—and a rear spoiler. Ungainly wedge that undermines the sophisticated look of the trunk.

GREEN MACHINE. The car reflects Japanese auto makers' new emphasis on ecology and safety, with plastic labeled for recycling and the latest protective features.

The J30 has two air bags up front, seat belt tensioners, and secure passenger seats. A split second before air bags inflate, reinforced roof

lars that would safeguard occupants if the car rolls over. But what will be prized is the J30's countenanced sense of nostalgia with the convenience of the contemporary. *Larry Arms*

Smart Money

IS A SHORT-TERM MORTGAGE BETTER IN THE LONG RUN?

If you're about to buy a home or refinance a mortgage, you may be pondering whether to take a 15-year mortgage or one that runs 30 years at a slightly higher rate. The raw numbers back the shorter option. But figures can be deceptive.

If you borrow \$100,000 for 15 years at the available rate of 8.5%, you'll end up paying about \$177,000 in principal and interest. Borrow for 30 years at 8.9%, and you'll pay out \$287,000. Simple arithmetic says you save \$110,000 if you can afford a 15-year loan's monthly payment of about \$985, vs. \$797 on a 30-year deal. The \$188 a month extra adds up to \$33,840 over the 15-year term of the loan.

REAL COST. But the real extra cost is considerably higher, claims San Francisco financial consultant Tim Kochis. Each year that a mortgage amortizes, a small

er portion of your monthly payment goes to pay interest—which is tax-deductible—and a larger part repays principal. As you lose the deductions, you have to

earn more pretax dollars to make the monthly payment. Assuming you are in the 30% tax bracket, you need \$1.43 pretax to pay each nondeductible \$1.

So, look again. After accounting for lost interest deductions, Kochis calculates, you would need \$220,253 in pretax income to pay off the 15-year loan. But with more dollars going to interest, you would need to earn just \$152,450 to make 15 years of payments (\$143,460) on the 30-year loan. The difference—\$67,803—is the increased real cost of paying an extra \$33,840 on the 15-year loan.

True, you still owe

\$79,000 on the 30-year mortgage after 15 years. But the lower payment lets you save \$188 a month, which Kochis suggests putting into stock. If the portfolio returns 8% after-tax over 15 years—an unrealistic based on the Jones industrial averages—it would grow to \$98,900. That can pay off the mortgage with a decent chunk left.

Richard Peach, deputy chief economist for the Mortgage Bankers Assn., says this makes sense as long as two things happen: The borrower has enough discipline to invest the monthly savings, and the optimistic out-of-return on the stock portfolio proves accurate.

Another strategy is to continue the 30-year mortgage after 15 years and use proceeds from the growing portfolio to make the payments. The bottom line is that a 30-year mortgage gives you more flexibility—an asset in itself. *Don J*

HOW A 30-YEAR LOAN CAN LINE YOUR POCKET

MONTHLY PAYMENTS:	
▶ 15-YR., \$100,000, 8.5%	\$985
▶ 30-YR., \$100,000, 8.9%	\$797
MONTHLY SAVINGS	
TOTAL SAVINGS OVER 15 YEARS	\$33,840
SAVINGS INVESTED, PLUS 10% RETURN*	\$98,900
LOAN BALANCE 30-YR. MORTGAGE AFTER 15 YRS.	\$79,000
NEST EGG AFTER SUBTRACTING LOAN BALANCE	\$19,900

*BASED ON LONG TERM DOW JONES INDUSTRIAL AVERAGE RETURNS
DATA: KOCHIS & FITZ INC

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Leisure

SPORTING CLAYS: AN OFFSHOOT OF SKEET TAKES OFF

Our golf cart careens down a steep, rocky path and jolts to a halt. I step onto a wooden platform. My instructor nudges my arms and feet into the correct stance and pushes a remote-control button. As I scan the ravine, a dot soars out of no-

take a variety of flight paths.

For such reasons, sporting clays is catching on fast for business socializing and family recreation

alike. Some 250 clubs have set up facilities since the sport

was formally introduced in 1985 from England, where it has been flourishing since the 1920s. Courses often are adjuncts of skeet establishments and are popping up at fashionable resorts as well.

The clays themselves are simply low-tech saucers, flung into the air by spring-loaded devices called traps. Various models are operated manually, electrically, or by a computer.

While sporting clays is an offshoot of skeet (from the Norse for shoot), enthusiasts say it isn't as intensely competitive. In skeet, you can be "humiliated by not breaking 100% of the targets," says Johnny Cloherty, head of the National Rifle Assn.'s new Sporting Clays Development Dept. But in sporting clays, as I learned from Jim Cauley, my instructor at the Homestead in Hot Springs, Va., "50% is what you expect."

RABBIT HOP. Anyway, the emphasis isn't on scoring, it's on having fun. Indeed, one of sporting clays' top guns, General Norman Schwarzkopf of Desert Storm fame, is intent on keeping the game from becoming serious and exclusive, as he found skeet to be in his younger Army days. It shouldn't become so competitive, he told *Sporting Clays* magazine, that "we drive out everybody except the elitists."

Certainly, you don't have to be among the elite to get started. "Most good clubs pro-

vide loaner guns" to newcomers, says John Higgins, chief instructor for the San Antonio-based National Sporting Clays Assn. (NSCA). A box of 25 shells runs around \$7, dues may be \$10 a year, and a serviceable shotgun may set you back a few hundred dollars.

At the upper end, there are courses as elaborate as the Homestead's. There, you walk or ride a mile-long complex of 12 stations that send

out clays in patterns simulating, say, a high-flying mallard or a rabbit darting along the ground. Guests pay \$80 for 100 rounds to shoot at 100 clays plus a gun, safety glasses, and earplugs.

If you get serious about sporting clays, the spending opportunities practically explode. Manufacturers such as Beretta, Browning, Krieger, and Perazzi turn out a variety of shotguns especially for the sporting-clays market; many cost \$2,000 to \$5,000, while a few run to \$25,000.

For those who want competition and camaraderie, NSCA's *Sporting Clays* (\$2 a year for six issues, 803 622-19) lists clubs as well as tournaments. Among the events this year will be the NSCA U.S. Open at the Homestead on May 22-24. With the right connections, you

where. I point the 20-gauge Beretta just ahead of it, squeeze the trigger, and watch a small clay disk shatter. Just as I start to congratulate myself, another disk streaks across the sky. I fire too hastily, and it disappears unscathed into the woods.

Not bad for a first go at sporting clays. The shotgun game was intended to simulate hunting—originally for practice, although now it's often a substitute. It's a sport that shares some of the clubby and outdoorsy attributes of skeet, although with more natural settings and more of an air of adventure. And the targets, instead of following a few predictable patterns,

Worth Noting

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■ **OENOPHILE ALERT.** The new monthly newsletter *Value Wine* publishes tasting results and recommends foreign and domestic buys from \$4 to \$15. Twelve issues cost \$30. Call 415 788-2891.



Instruction is \$50 an hour.

Public courses, such as Mid Hudson Trap & Skeet in New Paltz, N.Y., are an easy means to get into the sport. There, for \$30, owners Ginny and Hugh Davis provide 100 targets at a 10-station course.

might get in on invitational tournaments, too, where corporate sponsors bring new stars and other luminaries into the action. Who knows? That could be your next chance to outshoot Stony Norman. *Dick Jase*



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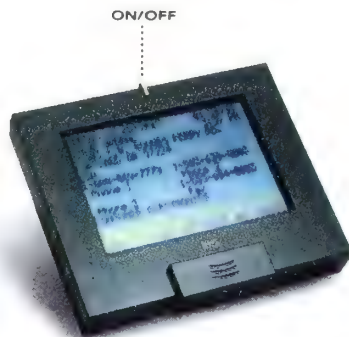
the Republic of China's long-term commitment to science and technology. Over the years from its inception in 1959, the Science and Technology Policy has created an environment for the country to join the world's industrial nations.

The Hsinchu Science-based Industrial Park (SIP), the nerve center of Taiwan's industrial development, has over 100 companies flourishing in its high-tech environment. Some major industries in the SIP include computers and peripherals, integrated circuits, optometrics, automation equipment and bio-engineering.

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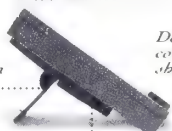


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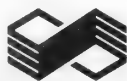
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Alaska Airlines

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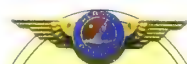
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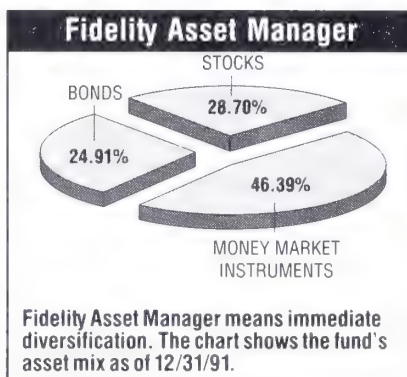
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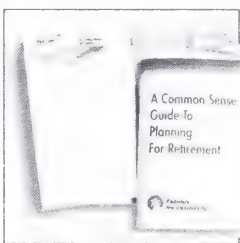


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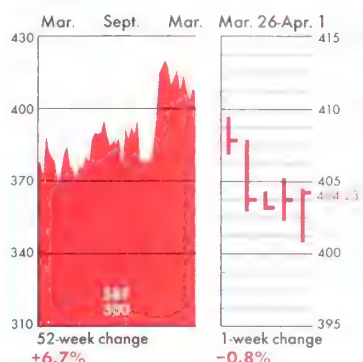
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Investment Figures of the Week

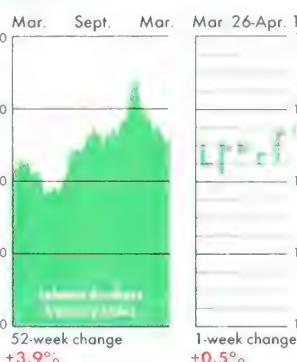
MARKET COMMENTARY

Market investors cheer in cuts, but apparently not these. When the Bank of England raised the discount rate on Wednesday, investors dumped stocks, the Nikkei down 764 points. The week's losses at a 1.1%. London stocks had a week, too, with investors for the upcoming election. The pound was down 2.3%. In the U.S. markets looked up for the Russell 2000, of small-company stocks, 2.2%.

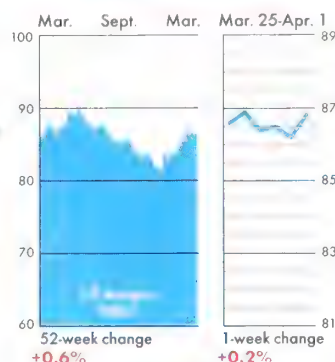
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

	Latest	% change Week	% change 52-week
STOCKS			
INDUSTRIALS	3249.3	-0.3	11.0
COMPANIES (Russell 1000)	214.5	-1.0	8.1
COMPANIES (Russell 2000)	202.4	-2.2	16.5
COMPANIES (Russell 3000)	229.2	-1.1	8.7
STOCKS			
(FINANCIAL TIMES 100)	2408.6	-2.3	-4.4
(NIKKEI INDEX)	18,581.8	-8.1	-30.6
(TSE COMPOSITE)	3411.9	-1.2	-3.0

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	4.11%	4.09%	6.0%
30-YEAR TREASURY BOND YIELD	7.90%	7.95%	8.2%
S&P 500 DIVIDEND YIELD	3.02%	2.98%	3.3%
S&P 500 PRICE/EARNINGS RATIO	25.2	25.4	17.6

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	399.7	399.1	Positive
Stocks above 26-week moving average	58.0%	62.1%	Negative
Speculative sentiment: Put/call ratio	0.44	0.40	Positive
Insider sentiment: Vickers sell/buy ratio	3.10	3.19r	Negative

r = revised

INDUSTRY GROUPS

	% change 4-week	% change 52-week	Strongest stock in group	% change 4-week	% change 52-week	Price
WEEK LEADERS						
DISTANCE TELECOMMUNICATIONS	8.5	17.4	AT&T	10.9	19.0	40 3/4
FACTURED HOUSING	7.8	50.7	FLEETWOOD ENTERPRISES	7.9	64.4	44 3/8
TOOL	7.4	42.5	CINCINNATI MILACRON	9.7	30.8	17
MENTATION	7.3	54.5	HEWLETT-PACKARD	8.2	61.0	80 1/2
MARKET AUTO PARTS	2.8	74.2	ECHLIN	10.9	42.0	17 3/4
WEEK LAGGARDS						
MINING	-11.1	-17.1	HOMESTAKE MINING	-18.4	-19.7	12 3/4
ION CONTROL	-11.0	-5.0	WASTE MANAGEMENT	-12.3	-2.8	38 3/8
	-9.7	33.5	STRIDE RITE	-17.4	15.4	24 7/8
SS AND LOANS	-9.4	3.1	H. F. AHMANSON	-15.1	-15.6	15 1/2
DUCTORS	-9.3	20.0	INTEL	-16.0	18.2	55 1/4

MUTUAL FUNDS

	%	LAGGARDS		%
Four-week total return		Four-week total return		
INVEST. PORT. DIVERS. INCOME	2.9	MONITREND GOLD	-16.1	
R DIVERSIFIED INCOME	2.5	STRATEGIC GOLD/MINERALS	-14.0	
TY SELECT AUTOMOTIVE	2.4	OPPENHEIMER GLOBAL BIO-TECH	-13.0	
52-week total return		52-week total return		
DM REGIONAL BANK B	54.0	STRATEGIC GOLD/MINERALS	-35.1	
TY SELECT REGIONAL BANKS	52.9	FIDELITY SELECT ENERGY SERVICE	-30.5	
STREET INCOME & GROWTH	49.4	NIKKO JAPAN TILT	-27.5	



RELATIVE PORTFOLIOS

Amounts at the present \$10,000 one year ago portfolio	Treasury bonds	U. S. stocks	Money market fund	Gold	Foreign stocks
gives indicate total returns	\$11,247 +0.93%	\$10,978 -1.27%	\$10,452 +0.07%	\$9,564 +1.00%	\$9,562 -0.11%

This page is as of market close Wednesday, Apr. 1, 1992, unless otherwise indicated. Groups include S&P 500 companies only; performance and share prices are as of market close.

Mar. 31. Mutual fund returns are as of Mar. 27. Relative portfolios are valued as of Mar. 31. A more detailed explanation of this page is available on request.

PRIVATE JUSTICE: GOOD IDEA, NEEDS WORK

The U.S. legal system is guilty of costly inefficiencies that hurt the competitiveness of American companies. A BUSINESS WEEK/Harris Poll of senior executives drawn from the BUSINESS WEEK 1000 found that 62% of those surveyed believe that the American civil justice system significantly hampers the ability of U.S. companies to compete with Japanese and European rivals. And 83% of those polled say that the fear of lawsuits inhibits their decision-making more than it did 10 years ago.

Now, after years of mounting frustration with soaring legal costs and lengthy court delays, companies are applying logic to the problem. They're resolving their battles privately, through mediation and arbitration, as well as such innovative techniques as mini-trials and rent-a-judge services (page 60). Some 600 top corporations have signed a pledge drafted by New York's Center for Public Resources, a non-profit group that promotes alternatives to litigation. Signers pledge to consider negotiation and other forms of "alternative dispute resolution" before heading to court against others who have taken the pledge. Some companies go further. Motorola Inc. makes its in-house lawyers seek all possible alternatives to running to court. At the same time, its lawyers counsel Motorola executives to forestall conflicts through better contracts, improved product quality, and truthful salesmanship.

Companies should be encouraged to settle their disputes, but such alternative dispute techniques have dangers that need addressing. Whether or not they embody a public interest or novel legal question, they are held in private. And the booming resolution business is largely unregulated. Almost anyone can be a self-appointed mediator. At a minimum, standards must be set so that mediators are qualified. Also, the proceedings must be open to the public. Alternative justice mustn't be used to avoid disclosure of potentially damaging information, such as health and safety risks.

Congress and the Bush Administration are right to promote alternative dispute resolution to help lift the burdens on the courts. But that should be just the beginning of efforts to bring efficiency to the legal system.

AN EXPORT BOOM IS A TERRIBLE THING TO WASTE

We tend to think of exporters as big companies, but many small U.S. companies do a terrific job selling abroad (page 70). These exporters need to be held up as an example to other small companies who want to export, but aren't sure how. If we're to take a page out of the fat export order book of the Germans, the success of their *Mittelstand* requires study. We need to tap the tremendous vitality at this level of the economy.

That's not happening in Washington. There, the most ur-

gent task is to energize the grab bag of agencies that ho promote and finance exports. The Commerce Dept., Small Business Administration, Export-Import Bank, Overseas Private Investment Corp., and Agency for International Development should be in the thick of things, but they languish in Washington's backwater.

In hot export centers such as the Twin Cities and Pittsburgh, one or two Commerce service-officers are expected to handle thousands of would-be exporters. It can't be done. The SBA has been a major disappointment, partly because of the penchant in the Bush and Reagan Administrations to dump political pals there. The Ex-Im Bank is beginning to finance the exports of smaller companies, but a much bigger effort is required. Given today's brutal budget constraints, resources must go where they are needed most. It's like a pork barrel that agricultural programs receive the most funding, even though they account for only 10% of U.S. exports.

In the face of Washington's near-abdication, the state charged into export promotion in the late 1980s with great enthusiasm, only to be zapped by their own budget crunches. The private sector is still trying, of course. But if federal and state governments would get their act together, we may be able to keep our export boom going.

WHAT'S SCARIER THAN THE DEFICIT? 100 ECONOMISTS

One hundred top economists, including six Nobel laureates, want to make an even greater joke out of fiscal discipline by boosting federal spending in an effort to hype the economy. It's always difficult to get a group of economists to agree on anything. When 100 of them say the same thing, something must be wrong. It's

Their open letter to the White House, the Federal Reserve, and Congress calls for more spending even if it would widen a federal budget deficit that, by the government's latest projections, will still be greater than \$200 billion a year at the start of the next millennium. If the economists' proposals could be magically enacted into law, financial markets would swoon, a resurgence in inflation would be all but assured, long-term interest rates would spike upward, and monetary policy would be thrown into chaos.

To be sure, the economists stress the right things. Their general theme is investment, not consumption. Reducing the cost of capital, restoring financial stability to state and local governments, shoring up the nation's crumbling infrastructure, and promoting productivity-enhancing investments in machinery, education, and health clearly are the directions in which policy ought to be headed. But not simply handing \$50 billion to state and local officials as the Gang of 100 recommends. What is needed are incentives for state and local governments to deliver services more efficiently, not a jackpot that will feed handouts to members of public-service unions. This is one time we're glad there's a stalemate between the Hill and White House. It means this set of proposals has no chance of being adopted.

**WHEN 19,000 CAREERS
ARE ON THE LINE**

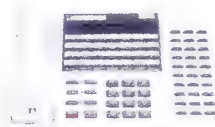
**WHO DO YOU WANT
STANDING BEHIND YOUR
PHONE SYSTEM?**



Forget ivy-covered walls and lounging on the grass. Today's students are rushing to meet the 21st Century. Libraries are now "multimedia buildings." Lecture halls are "instructional telecommunications centers," and laboratories are "applied technology facilities." At California State University, Fresno, there's even a special system to integrate all of these resources. It's called a telephone.

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Plus, Spirit gives you a standard airbag. And the Owner's Choice Protection Plan, a warranty choice you don't get from Honda or anyone else.^{††}

But put 70,000 miles on a Spirit and

then compare it to a new Accord. You wouldn't think it could possibly compete. But it not only competes...it wins.

The fact is, we recently asked 100 people to make just such a comparison.*



Dodge Spirit



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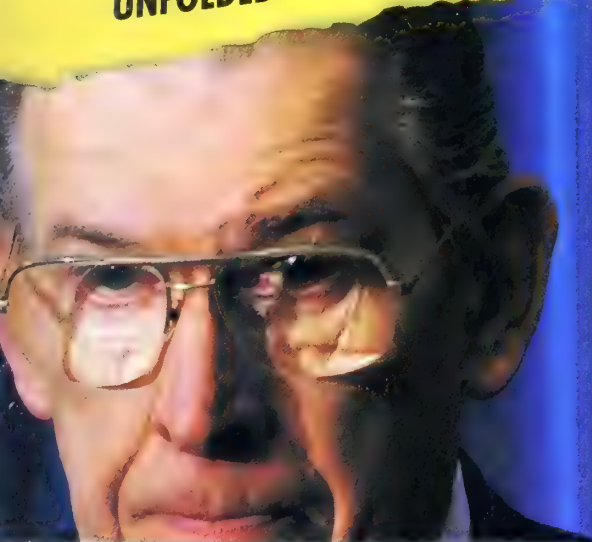
THE BOARD REVOLT

PAGE 30

▶ HOW THE COUP UNFOLDED

▶ WHAT IT MEANS FOR GM'S FUTURE

▶ A NEW ERA FOR CORPORATE BOARDS



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NEW AUDI 100 V-6 TAKES AIM AT LEXUS AND ACURA

*Audi 100 hits mark as the first automobile in its class
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B Y K A R L T R E U T L E R

Not content to let Lexus and Acura corner the market, Audi is determined to offer the American car buyer something never seen before: German engineering coupled with Japanese pricing.

Aimed directly at buyers interested in the Lexus ES 300 and the Acura Legend, the all-new Audi 100 V-6 comes with ABS and driver's side air bag, the handling and control buyers have come to expect from Audi, and The Audi Advantage: A comprehensive owner protection plan not offered by Lexus and Acura. The plan includes the cost of all scheduled maintenance, even oil changes, for three years or 50,000 miles.*

Here in the States, where the Japanese have made inroads into this automotive segment, Audi knew it would have to hold its ground against the popular Japanese contingent. And in a comparison test conducted by *Road & Track*, it did just that. As they put it, "...this confident 'new' Audi has a distinct voice, and it can roar with the best of the lions from Japan...The Audi (is) rock-solid, running as sound as a Deutsche mark...It's more affordable than the Legend...(and)...has driving personality and road-course character all over the Legend."

When the new Audi 100 was unveiled in Europe, automotive experts there "did a 180" — reversing their perception of Audi vis-à-vis the competition. Given the opportunity to get behind the wheel of a new Audi, those considering a high-line Japanese car may soon find themselves "doing a 180" as well.

For more information on the all-new Audi 100 V-6, call 1-800-FOR-AUDI.

At right, the new Audi 100CS.





THE HIDEBOUND CULTURE AT GM'S DETROIT HEADQUARTERS, WITH BUDDY FOLLOWING BUDDY UP THE LADDER, HAS BEEN DEALT A SERIOUS BLOW

Cover Story

30 THE BOARD REVOLT

It took years of mismanagement and rivers of red ink, but it finally happened: On Apr. 6, General Motors' outside directors picked up the troubled giant and stood it on its head. The coup left Chairman Robert Stempel effectively demoted and John Smale in charge of the GM board's executive committee. For Corporate America, the message is clear: The status quo won't do

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John Smale 'woke up a sleeping giant' at P&G. Can he do it again?

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Can Stempel handle the betrayal, humiliation, and loss of face?

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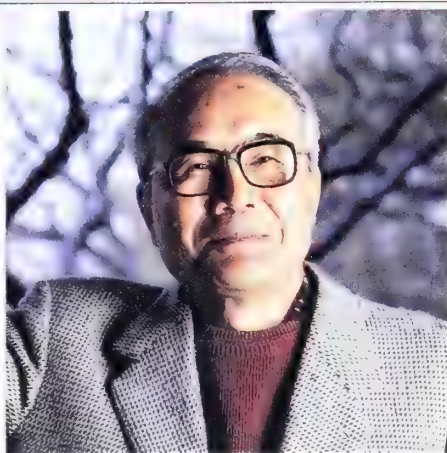
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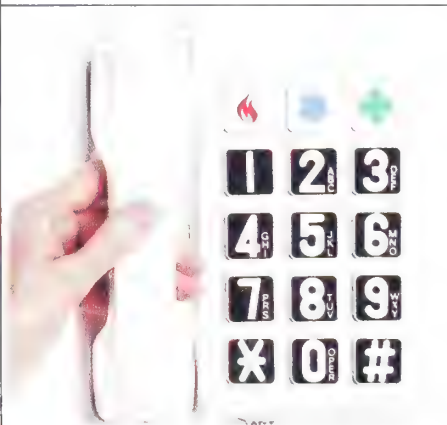
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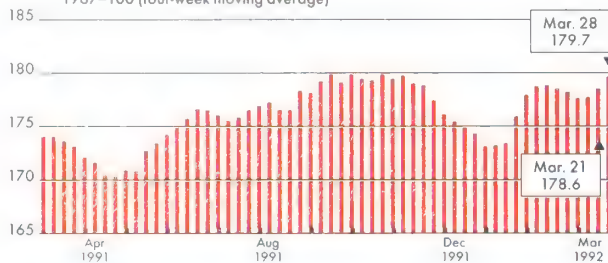
BusinessWeek Index

PRODUCTION

Change from last week: 0.6%

Change from last year: 3.8%

1967=100 (four-week moving average)



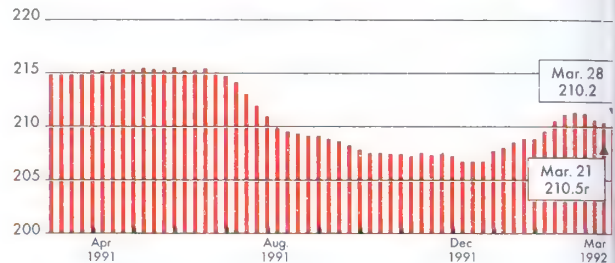
The production index increased during the week ended Mar. 28. On a seasonally adjusted basis, auto, trucks, and electric power output were up strongly, while steel, coal, paperboard, and lumber production declined. Rail-freight traffic, crude-oil refining, and paper production were all flat for the week. Before calculation of the four-week moving average, the index increased sharply to 182, from 180.8. For March, the index stood at 179.7, up from 178.3 in February.

BW production index copyright 1992 by McGraw Hill Inc.

LEADING

Change from last week: -0.1%

Change from last year: -2.2%



The leading index fell slightly during the week ended Mar. 28. The growth in materials prices continued to turn up, the only good sign for future economic growth. On the minus side were lower stock prices, increased business failures, and deteriorating growth in M2 and real estate loans. Bond yields were virtually flat. Before calculation of the four-week moving average, the index dropped to 209.2 from 210.3. For March, the index declined to 210.2 from 211.4 for February.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (4/4) thous. of net tons	1,828	1,820#	14.8
AUTOS (4/4) units	115,299	116,911r#	24.8
TRUCKS (4/4) units	82,153	87,818r#	24.9
ELECTRIC POWER (4/4) millions of kilowatt-hours	52,163	53,591#	5.0
CRUDE-OIL REFINING (4/4) thous. of bbl./day	13,266	13,079#	2.2
COAL (3/28) thous. of net tons	19,224#	19,152	-1.1
PAPERBOARD (3/28) thous. of tons	786.3#	799.9r	5.3
PAPER (3/28) thous. of tons	772.0#	771.0r	1.8
LUMBER (3/28) millions of ft.	508.2#	519.6	4.1
RAIL FREIGHT (3/28) billions of ton-miles	21.2#	21.2	12.8

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWSA, SPPA, Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (4/8)	132	134	136
GERMAN MARK (4/8)	1.63	1.65	1.67
BRITISH POUND (4/8)	1.75	1.72	1.79
FRENCH FRANC (4/8)	5.51	5.61	5.65
CANADIAN DOLLAR (4/8)	1.19	1.19	1.15
SWISS FRANC (4/8)	1.49	1.51	1.41
MEXICAN PESO (4/8)	3,044	3,047	2,986

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (4/8) \$/troy oz.	337.500	344.000	-7.1
STEEL SCRAP (4/7) #1 heavy, \$/ton	92.00	92.00r	-7.5
FOODSTUFFS (4/6) index, 1967=100	201.9	201.9	-4.3
COPPER (4/4) ¢/lb.	106.7	106.0	-5.2
ALUMINUM (4/4) ¢/lb.	60.5	59.0	-10.1
WHEAT (4/4) #2 hard, \$/bu.	4.23	4.43	40.5
COTTON (4/4) strict low middling 1-1/16 in., ¢/lb.	54.99	53.44	-29.3

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (4/3) S&P 500	402.59	407.53	6
CORPORATE BOND YIELD, Aaa (4/3)	8.35%	8.36%	-5
INDUSTRIAL MATERIALS PRICES (4/3)	97.2	96.7	2
BUSINESS FAILURES (3/27)	450	445	10
REAL ESTATE LOANS (3/25) billions	\$400.3	\$401.5	-2
MONEY SUPPLY, M2 (3/23) billions	\$3,436.4	\$3,443.2r	1
INITIAL CLAIMS, UNEMPLOYMENT (3/21) thous.	456	447	-10

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Br. street (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusted data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
BUSINESS WEEK PRODUCTION INDEX (Mar.)	179.7	178.3r	1
BUSINESS WEEK LEADING INDEX (Mar.)	210.2	211.4r	-2
EMPLOYMENT, CIVILIAN (Mar.) millions	117.3	117.0	0
UNEMPLOYMENT RATE, CIVILIAN (Mar.)	7.3%	7.3%	0

Sources: Sources: BW, CIBCR, BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (3/23)	\$938.2	\$943.0r	1
BANKS' BUSINESS LOANS (3/25)	289.1	289.8r	-10
FREE RESERVES (4/1)	1,470	427r	20
NONFINANCIAL COMMERCIAL PAPER (3/25)	140.0	141.4	-

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (4/7)	3.92%	4.07%	5.9
PRIME (4/8)	6.50	6.50	9.0
COMMERCIAL PAPER 3-MONTH (4/7)	4.18	4.28	5.9
CERTIFICATES OF DEPOSIT 3-MONTH (4/8)	4.08	4.19	6.0
EURODOLLAR 3-MONTH (4/4)	4.21	4.26	6.2

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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THE UPS AND DOWNS OF 'DOWNWARD MOBILITY'

I was happy to see in "Downward mobility" (Cover Story, Mar. 23) that some "dumppies"—downwardly mobile professionals—diverted from "yuppie heaven," are exploring such undervalued occupations as teaching and social work. I look forward to the day when people can choose the "helping" professions over the "having" professions without descending to the lowest rung of the middle class. Before that can happen, society must wake up and see that a well-educated, self-reliant population is just as important an economic asset as the voracious spending of the consumers who falsely buoyed the U.S. economy in the 1980s.

Ann B. Graham
New York

Your article highlights a problem that affects not only managers and professionals in the 50-plus group but the majority of Americans. The entire U.S. economy is based upon rampant consumerism, and what we see now is the inevitable result of a spending lull. The ideas you offer to prepare for and survive the downslope, however, are Band-Aid expedients. As a Brit who has lived in the U.S. for 11 years, I perceive that two basic cornerstones of financial stability that drive the European markets—"Export or die" and "Save, save, save"—are nowhere part of the American Dream.

Syd Darlington
Seattle

I can't believe it. In your story, you actually suggested that corporate castoffs consider teaching. Man, are you deluded! As a teacher with nearly 20 years' experience, I assure you I will never earn \$60,000 a year (like the example in your article), nor have I met any teacher who has. My district, like many others nationwide, has been hit with catastrophic budget cuts. Thousands of

teachers are being laid off or fired. Those of us who remain face annual salary cuts of 3% to 10%, increased workloads, reduced benefits, and wretched working conditions.

William Joseph Mill
Los Angeles

I'm extremely disappointed in the overly pessimistic tone of your article. I'm not a downward slide—it's an upward escape. In the past three years, I have gone from vice-president to dumpie "despey" (desperately seeking professional employment) to "flippy" (freedom loving, invigorated portfolio professional). I now have a portfolio of work covering six to eight different organizations during a year. I have more freedom, more love of work, more meaningful work, and a higher income than when I was a corporate captive.

Jim Haug
West Bloomfield, Mich.

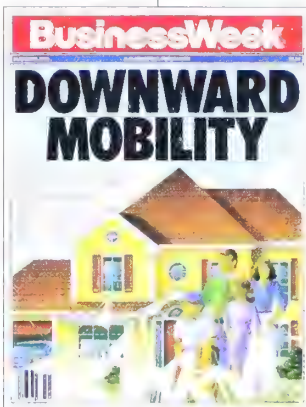
Voluntarily taking to downward mobility to track to become controller of a small manufacturer has broadened my business skills far beyond any I could have developed in the environment of the multinational conglomerate I left.

Frederick L. Dudley, Jr.
Dudley, Mass.

I'm sorry, I can't shed a tear [for dumpies]. My husband is a skilled tradesman on indefinite layoff since last October. Until 1983, he had never been out of work. Since then, we have been through one plant closing and now our fifth layoff. Middle managers have done such a good job at saving companies money by laying off workers that they now have no one to manage. Welcome to the real world. Join us in the unemployment line.

Anita L. Rago
Racine, Wis.

Downward mobility isn't always as bad as it sounds. I'm a 23-year-old ex-investment-banking analyst who earned \$45,000 in my first year out of



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Readers Report

college. After losing that position, I now earn nearly as much running my own business selling fax machines by mail order. But instead of being someone's grunt, I'm president and CEO, and it looks like I won't have to lay myself off very soon. To those who ever dreamed of going it on their own, I say there may never be as many opportunities as there are during a nice recession like this one.

Paul Janavs
Los Angeles

Your story implies that, despite outplacement help, many individuals are unable to find permanent work. Most corporations feel they are helping displaced workers by teaching networking, interviewing, and resumé skills. Perhaps they should also provide access to courses teaching at least the rudimentary skills involved in starting and running a small business. Many of these people will lose their severance payments, savings, and opportunity to regain financial stability because of a lack of basic knowledge. Corporations can and should do more to help their discarded workers.

Robert M. Burke
Marlborough, Mass.

CORRECTIONS & CLARIFICATIONS

In the story "Painting a new face on Revlon" (Top of the News, Apr. 6), we mistakenly listed Nancy Sinatra as one of the women who were featured in Revlon Inc.'s "Unforgettable Women" advertising campaign. The woman featured was actually Barbara Sinatra.

Please spare us the whining about the 2 million middle managers who've lost their big-company jobs forever. The reason these empty suits can't find jobs anymore is that experts below and above them have exposed the uselessness of middle managers in general.

Joe Roy
Newton, Mass.

That those who were once highly paid can't translate their skills into value-creating services the marketplace will reward confirms that free markets are efficient. It's not "bad news for the economy as a whole," as you state.

Frank Gutowski
Houston

You told of the plight of Gerald and Elaine Feldman: they have lived years in the same house but now are about to go into foreclosure. They have put a humongous mortgage on the house in order to pay for advanced degrees and college for their three children: an attorney, a psychologist, and an environmentalist.

Poor Mom is working for \$8 an hour and Dad can't find a job. Did their highly educated offspring ever give thought to helping out their parents who gave their all for them? What ever happened to the human race?

Adrienne Marshall York
Fallbrook, Cal.

Editor's note: The Feldman children have their own financial challenges. The attorney's wife is expecting a baby in May, the psychologist works on a part-time in a bank, and the environmentalist doesn't get paid much.

Letters to the Editor should be sent to Readers Report, Business Week, 1221 Avenue of the Americas, New York, N. Y. 10020. Fax: (212) 512-4444. Telex: 12-7960, Intl. 4998204. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.

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wrapped in plastic is likely to carry more bacteria than vacuum-packed beef. In fact, the bright red color of supermarket beef indicates that air has gotten to it, reducing the time it will stay fresh. Our beef's naturally darker color indicates that oxygen has been kept out, yet its moisture has been retained for more flavorful cooking.

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DUELING OVER THE PEACE DIVIDEND

For the past 50 years, military spending has been the single most pervasive fact of U.S. economic life. Defense dollars have sustained entire industries, from the aerospace companies of Southern California to the high-tech weapons makers of New England. The Pentagon is still the country's biggest buyer of goods and services, the biggest source of research-and-development funds, and the biggest employer. And cuts in the defense budget have helped prolong the current recession: Reduced military spending accounts for about a third of the drop in industrial production over the past 18 months and much of the decline in manufacturing employment.

Despite such problems, the "peace dividend" offers a tremendous opportunity. While Congress is wrestling with such issues as where and how to slash the Pentagon's budget, which bases to close, and which weapons systems to eliminate, the key debate still lies ahead: How should the savings, which might be as much as \$100 billion annually, be used? Some have suggested paring the ever-growing budget deficit, expected to top \$400 billion this year. Others want to fund new domestic programs and rebuild the nation's frayed infrastructure. The choice could help determine how competitive the U.S. will be in the 1990s.

Two new books offer dramatically different visions of how to make the hard transition to a post-cold-war economy. In *Small Wars, Big Defense: Paying for the Military After the Cold War*, Washington University's Murray Weidenbaum argues for using the passing of the Soviet threat to reduce government's role in the economy. By contrast, in *Dismantling the Cold War Economy*, Ann Markusen and Joel Yudken of Rutgers University advocate actively redirecting government policies and resources from military to civilian uses.

Weidenbaum, who headed President Reagan's Council of Economic Advisers in 1981-82, believes in strong national security. But like many conservatives, he abhors government bureaucracies, of which the Pentagon is clearly the worst example. So, says Weidenbaum, cuts in defense spending should be used to reduce the budget deficit, freeing up economic resources for private investment.

DISMANTLING THE COLD WAR ECONOMY

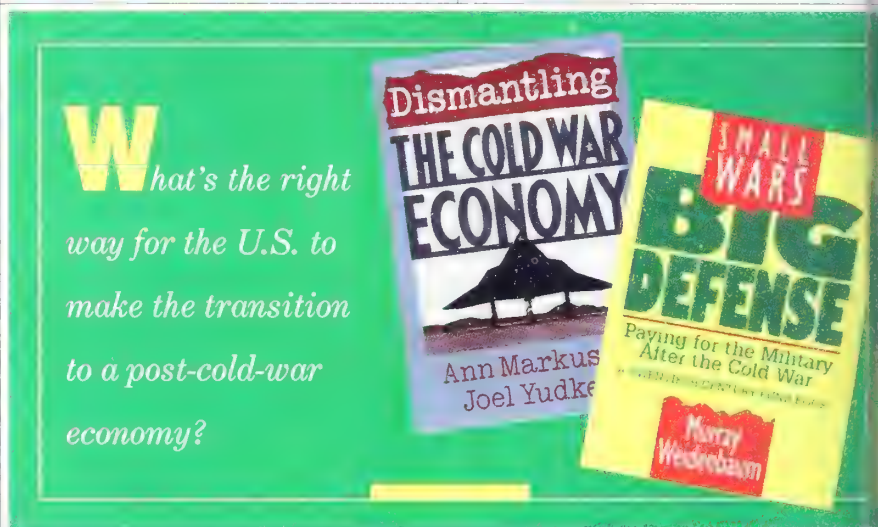
By Ann Markusen and Joel Yudken
Basic Books • 314pp • \$25

That's a position with which most mainstream economists would agree. But Weidenbaum goes further. Believing in the power of the market, he sees little need for expensive government programs to ease the transition of defense companies and workers. Military spending is expected to fall from 5.9% of gross national product in 1989 to 3.5% in 1997—a drop Weidenbaum thinks the economy can absorb easily. The adjustments needed, he says, are not much different from "the responses that occur regularly from shifts in consumer

single customer, military manufacturers are not well-suited to compete in civilian markets, Weidenbaum argues.

No such worries trouble Markusen and Yudken, who propose a massive program for transforming defense companies into civilian manufacturers. They call for government to spend the peace dividend on the environment, health, and housing. Earlier conversion attempts failed, they argue, because no one put big bucks behind mass transit and other social goals. "To work," say Markusen and Yudken, "a technology policy must include commitments by the government and by private parties to purchase equipment and services pioneered."

Indeed, Markusen and Yudken believe the Pentagon had the right idea all the years. The Defense Dept., they note, used guaranteed markets, government funding for R&D, protection from foreign competition, and cheap loans to build such industries as aerospace, computer



demand, or from technological changes... or from changes in the pattern of foreign trade."

Weidenbaum's distrust of bureaucracy is well-founded. But his refusal to recognize the watershed nature of recent events denies a historic opportunity to improve U.S. competitiveness. By lowering defense spending, the government can significantly expand its support of civilian research, development, and manufacturing technologies.

Weidenbaum, however, is contemptuous of attempts to convert defense companies to civilian ends, currently a hot topic inside the Beltway. "By and large, past attempts by large defense contractors to use their capabilities beyond the aerospace market have been unsuccessful," he says, citing such examples as Grumman Aerospace Corp.'s ill-fated attempt to make buses. Accustomed to selling high-tech, high-cost products to a

and communications. Similar policies, the authors argue, could nurture companies that could meet civilian needs.

Here's a case where two books are better than one. Markusen and Yudken account of the historic role of defense spending in creating industries is persuasive, but surely they underestimate the difficulty of using government funds to directly guide the civilian economy. In a world of rapidly changing technologies, for example, the government is apt to be very good at picking winners and losing industries. Weidenbaum offers a glimpse of the pitfalls of expecting too much from the peace dividend. But Markusen and Yudken more accurately convey the opportunities for growth when the economy learns to live without Big Daddy Defense.

BY MICHAEL J. MANDL
Associate Economics Editor Mandel covers industrial policy.

Costlier than a corporate jet.

The company mail cart has quietly become a vehicle of runaway abuse. According to a Wall Street Journal report, the impulse to "overnight it" needlessly cost American businesses over \$3 billion last year.

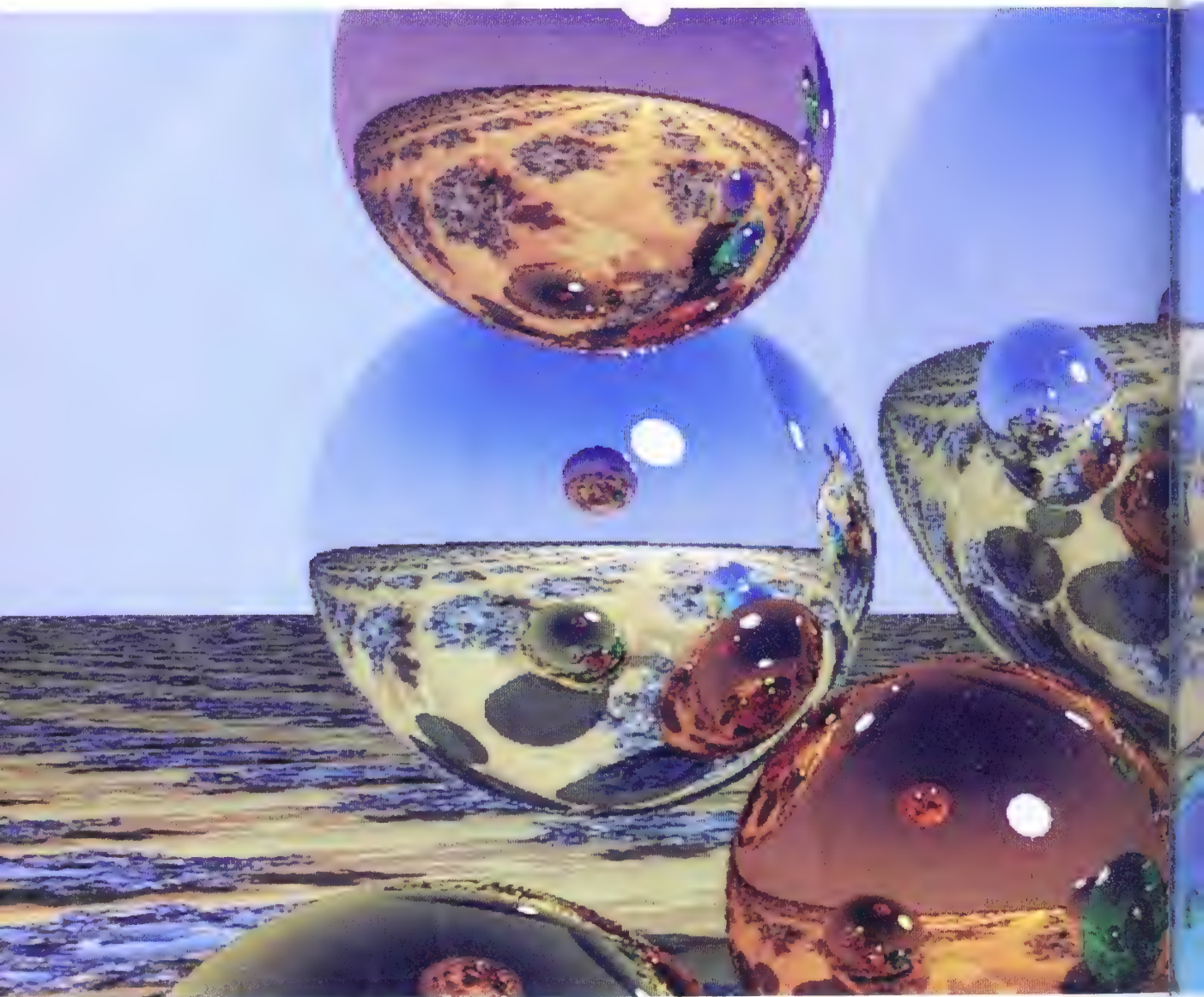
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In an historic test at a national research lab,



picture is also making history.

m/6000 was pitted against a Cray® superior selected applications, and it won. But even ing, the same lab has since replaced one of th a network of our smaller machines. point this out, not to brag (well, maybe a because the RISC System/6000 is fruit of e investment in research, and it shows how s is changing. spend over \$6 billion a year on R&D, and we o more pure research than anyone. But op scientists work more closely with real and it helps. For the RISC System/6000, the pioneered its basic technology also led it to

market. And the original lab team not only stayed with it, half of them moved from New York to Texas to join the development team.

As a result, our customers (often researchers themselves) can have massive computing power at affordable prices, to help them improve their own products.

But what hasn't changed about IBM research is the value of a person like John Cocke, who is one of 58 IBM Fellows. It's a title he earned by having great ideas, and it gives him the one thing he treasures most. Complete freedom to have more of them.

IBM®

JERRY'S FLAT TAX COULD DO A MOUNTAIN OF GOOD

BY PAUL CRAIG ROBERTS



Its impact would be phenomenal: The plan would boost economic growth, create 3 million jobs, lower taxes on wage-earners, and eliminate the federal deficit

Candidate Jerry Brown has done all of us a favor by raising the only substantive economic issue in an otherwise uninteresting Presidential campaign. He proposes to junk our unjust and complex-beyond-understanding tax code and replace it with a 13% flat tax on personal income and a 13% value-added tax (VAT). There would be no payroll tax on employment, and corporate income would be passed through to shareholders and taxed as personal income, thus eliminating the double taxation of dividends. Investments would be written off in the year they are made, and the confiscatory estate tax would be abolished along with part of the capital-gains tax.

There would be only three deductions from personal income—charitable contributions, mortgage interest, and rent—thus giving the poor and the young the benefit of the homeowner's deduction.

The National Center for Policy Analysis in Dallas, which has a good forecasting record, has analyzed Brown's plan and concluded that its impact would be phenomenal. It would raise the economic-growth rate a full percentage point and bring the economy an additional 3 million jobs. It would more than pay for itself—bringing in \$250 billion more in tax revenues annually than the current system—and would eliminate the federal deficit.

DOUBLE PLAY. The genius of Brown's plan is that it shifts taxes from labor to capital while lowering marginal tax rates on capital income. For wage earners, this is the best of all possible worlds. Their productivity and real wage growth would benefit from higher investment even as owners of capital pay a higher overall percentage of tax collections.

In our current tax system, the marginal tax rate on capital income is about 10 percentage points higher than the marginal tax rate on labor income. Consequently, our economy underutilizes capital, and labor productivity and wages are lower than they otherwise would be. The flat-rate tax, expensing of investment, and the pass-through of corporate income would eliminate most of this distortion and substantially boost capital formation and economic growth.

The reason Brown's plan can shift the tax burden from labor to capital, while lowering the marginal tax rate on investment, is the VAT, which replaces the corporate-income and Social Security taxes. The VAT falls on the factors of production in proportion to their share of gross income, which is two-thirds on labor and one-third on capital. That is a lower burden on labor than comes from the current mix of corporate-income and payroll taxes. In the past decade, corporate-income-tax reve-

nue has averaged about 25% of payroll tax revenue, placing the burden three-fourths on labor and one-fourth on capital.

The claim that VAT would raise prices and be regressive is uninformed and propagandistic. From an economic point of view, VAT simply substitutes for the 15.3% payroll tax and raises the price of labor and the high marginal rates that raise the cost of capital.

The National Center for Policy Analysis concludes that under the Brown plan, people who rely solely on wage income will pay less in taxes than they now pay at virtually every income level and that low- or middle-income families would pay higher taxes only if they had substantial investment income.

MISPLACED BARBS. Why, then, all of the criticism of Brown's proposal? First, there are those critics who oppose higher economic growth because they believe it ruins the environment or the bond market. Second, there are the redistributionists who oppose a free-market economy. To them, "tax fairness" means income equality. Third, there are special-interest lobbies, including bureaucrats and public-sector unions, whose constituents are not served by growth in private-sector jobs and a reduction in the number of unemployed Americans.

The problem with Brown's plan, in fact, is that it raises too much revenue, thus permitting a continuation of failed government programs and the explosive growth in entitlements, both of which are destructive to private-property rights and individual responsibility. What Brown has done is to expose the growth agenda and put it at the service of big government.

Brown would have instilled more confidence in his revolutionary tax posture if he had announced that he would offer the Vice-Presidential slot to pro-growth Republican Jack Kay. That would send a clear message that he intends to unite the growth forces against Washington. Instead, he picked Jesse Jackson, leader of an ossified special-interest lobby that believes the future of minorities depends on quotas.

Brown could do wonders for his credibility by showing the public that he understands that the American left wing, with its policy action committees, think tanks, foundation journalists, university faculties, and plaintiff bar, is a large part of the Establishment he rails against. If he really had confidence in his tax program, he would not be making protectionist sounds but rather stressing that the way to compete is to have a domestic climate favorable to both investment and the creation of jobs.

PAUL CRAIG ROBERTS IS CHAIRMAN OF THE INSTITUTE FOR POLITICAL ECONOMY IN WASHINGTON

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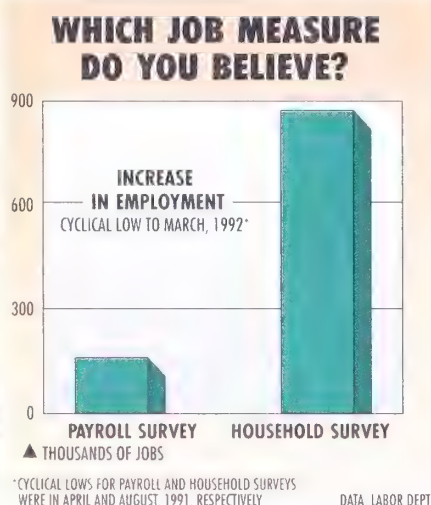


BY GENE KORETZ

GOOD NEWS MAY BE HIDDEN IN THOSE GLOOMY JOB NUMBERS

Most observers were deeply disappointed by the March employment report, which showed the jobless rate stuck at a 6½-year high of 7.3% and payroll employment up by a mere 19,000. But not economist Irwin L. Kellner of New York's Chemical Bank, who is intrigued by a growing divergence between the Labor Dept.'s survey of business payrolls and its other employment measure, its survey of households.

"While payroll employment has risen by only 27,000 since last July," notes Kellner, "the household survey shows



an increase of 620,000. That's a meaningful difference."

To be sure, economists regard the payroll survey as more reliable because it's based on payroll records rather than personal interviews. But the household survey has the advantage of covering a wider segment of the working public, including the self-employed. And in terms of growth rates and numbers added to job rolls, the two measures tend to track together over time.

Kellner points out that an exception to this tandem movement of employment measures occurs during recessions and the initial stages of recovery. First, partly because the payroll survey counts jobs rather than people, it usually falls far more precipitously during downturns as dual jobholders lose one or both of their jobs. That, in fact, is what seems to have occurred during the 1990-91 recession. When the payroll figures are revised later this year, they are expected to show a decline of some 2.2 million

jobs between the onset of the recession and the payroll count's cyclical low last year, compared with a drop of 1.5 million posted by the household survey.

But as the economy shifts from recession to recovery, observes Kellner, it's usually the household survey that turns up first and more definitively, as people become self-employed or find jobs with small companies or new businesses that aren't covered by the payroll survey. "That's exactly what seems to be happening now," he says, noting that job gains posted by the household survey from its cyclical low are nearly six times as large as the 150,000-job rise registered by the payroll survey (chart).

Not everyone agrees that the household survey is more reliable at this juncture, however. "The difference between the two measures is unusually large, so this time, it could be the household data that are more out of whack," cautions one Labor Dept. economist.

But if Kellner is right, payroll employment should turn up sharply in the next few months. Past cyclical patterns indicate that while the household survey may lead the way during an incipient upturn, payroll jobs are never far behind. And because payroll jobs fall more sharply in downturns, they rise a lot faster once a recovery takes hold.

EASTERN GERMANY'S LOW LABOR COSTS DIDN'T LAST VERY LONG

The chances that Germany's Bundesbank will move to ease monetary policy and lower interest rates significantly this year are becoming increasingly slim, says economist William P. Sterling of Merrill Lynch & Co. And the reason is not simply rising inflation and a large budget deficit but a growing awareness that a development that was supposed to help quell budgetary and inflationary pressures—the availability of low-cost labor from eastern Germany—is proving to be an illusion.

When the government turned to massive deficit spending to implement reunification, it knew inflation would take off temporarily. But it also expected that private investment in eastern Germany would boom as companies took advantage of the region's low labor costs, thus reducing the cost of reunification. Instead, western German unions have helped eastern German workers close the wage gap between East and West, causing manufacturing wages to double. Indeed, Sterling points out that at current exchange rates, eastern German manufacturing wages are push-

ing \$14 an hour—close to U.S. levels.

The upshot, says Sterling, is that this trend is likely to discourage future private-sector investment, placing more of the burden of reconstruction on the government. And that spells continuing high budget deficits and real interest rates, which will dampen economic activity in both Germany and the rest of Europe.

NEW-CAR SALES COULD BE TURNING THE CORNER

Although retail sales rose a healthy 3.4% in January and February, the flat pace of new-car sales has made many observers skeptical of a true consumption rebound. Economists at J.D. Power, Peabody & Co., however, believe that consumer car-buying may be stronger than it appears. The reason: Business purchases of new cars, mainly fleet sales, have been declining as a percentage of new-car sales.

Whereas business purchases equaled the number of cars bought by consumers as recently as mid-1991, they were down to 78% of consumer purchases by February of this year. If fleet sales, which have been down-pedaled by automakers since last spring, begin to rise again and consumer purchases continue to grow, new-car sales could really accelerate, note the Kidder analysts.

U.S. VENTURES ARE BLOOMING IN THE OLD EAST BLOC

Those who believe the U.S. has been slow to take advantage of emerging investment opportunities in Eastern Europe and the former Soviet Union, take note: *East European Investment Magazine*, a new New York-based bimonthly reports that the U.S. led all other nations in the number of deals announced in the fourth quarter of last year. "American companies announced 4 deals—a third of the total," says editor and publisher Mark Dixon.

While America racked up the top individual investments, German companies snatched first place in terms of value—\$3.7 billion, compared with \$1.1 billion for the U.S. "Most of the German deals were made in eastern Germany," notes Dixon.

The U.S. also led the pack in the number of different countries targeted for investment. And preliminary data indicate that it is continuing to call up the most deals this year, as well.

New Jersey

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Edison's tradition of useful
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densed soup.

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It is estimated that \$15 billion a
year, or as much as 25% of all
dollars expended annually for
research and development of new
and better technologies, are spent



in New Jersey. Scientific
and industrial R&D in New
Jersey spans a vast array of
technological progress in telecom-
munications, electronics, pharma-
ceuticals, food processing, chemi-
cals, and many other industries.

"Businesses that require the
competitive advantages of the
newest technologies, and believe
that it is important to be in a
place where high technology
stands for progress, look to New
Jersey first," notes New Jersey
Commerce Commissioner Barbara
McConnell.

INVESTING IN TECHNOLOGY

Today, New Jersey is backing
technological advancement with
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In 1984, voters overwhelmingly
approved a \$90 million bond issue
to establish a dozen Advanced
Technology Centers to promote
science and technology, facilities
that have received a further \$20
million in direct support from the
state. In 1988, New Jerseyans
voted to finance \$350 million
worth of investments in computer
and other technologies at public
and private colleges throughout
the state.



From top to bottom: On business days, 13 million calls go through AT&T's Network
Services Division at the National Operations Center in Bedminster; Alexander Hamilton
Memorial Paterson at the Great Falls of the Passaic River, a national historic landmark;
Financial Place is the hub of downtown Jersey City's growing financial industry; Research
Johnson & Johnson makes the pharmaceutical giant a leader in health care products.

From top to bottom courtesy of AT&T; New Jersey Division of Travel & Tourism; Public Service Electric & Gas Company, and Johnson & Johnson

In
bumper to bumper
traffic it
goes just as fast
as a much
more expensive
car.



IN HEAVILY congested traffic, the Subaru® Legacy™ can easily keep up with any Mercedes. And like a Rolls Royce, it can carry five comfortably. And like the highest priced BMW, the Legacy has no trouble going as fast as the law allows. And the Legacy can do all those before-mentioned things at a remarkably low price.

Okay, to be honest, at a next-to-nothing price. Because right now you can get a brand new Legacy L Sedan with the Extra Value Group for \$12,999*.

\$12,999. Now, you're probably a little put-off by that price. A car that costs so little cannot possibly be any good, you're probably thinking. Well, this is what *Car and Driver* said about the Subaru Legacy when it was first introduced: "The Legacy looks and feels like a quality piece. It makes us think Subaru's leap into

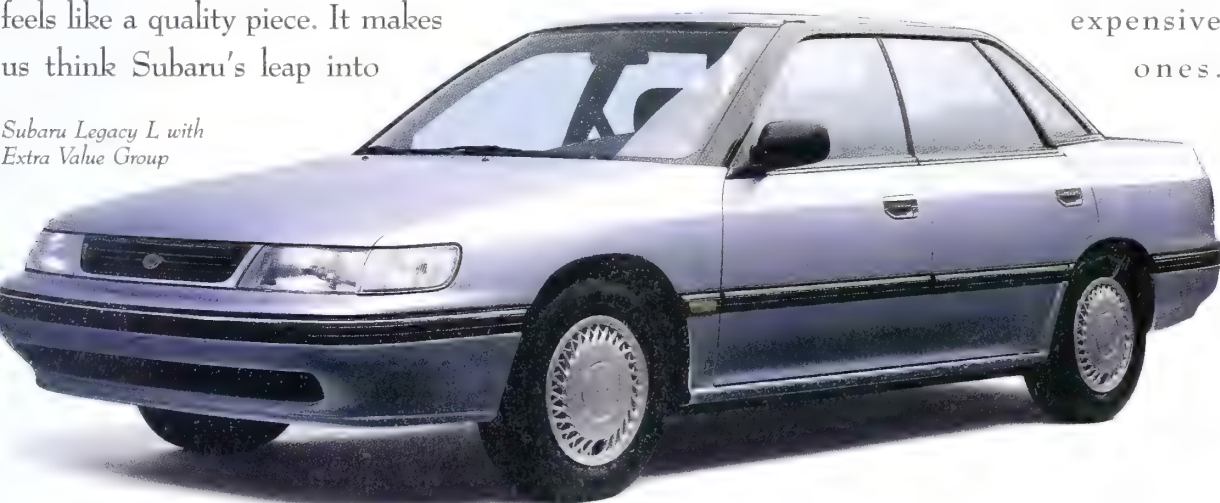
the mainstream is going to create some surprisingly large ripples."¹

Okay, now you're probably thinking, for \$12,999, I must get a Legacy that's stripped of everything but the ashtray and the vinyl sun visors. Not true.

For \$12,999 you get this Legacy with air conditioning. An 80-watt AM/FM stereo cassette. Power windows and locks. A 130 horsepower overhead cam engine. Multi-point fuel injection. 90 cubic feet of passenger space. And all the special engineering and structural features which translate into the type of durability that Subaru is famous for. (Important buying consideration—93% of all the Subaru cars registered in the last ten years are still on the road and running today.²)

Check out a new \$12,999 Subaru Legacy the next time you're stuck in traffic. It's that stylish-looking car that's keeping right up with those much more expensive ones.

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*Suggested retail price less \$500 Extra Value Discount. Does not include dealer preparation, inland transportation, taxes, license and state or title fees. Dealer's actual price may vary. ¹June, 1989. ²Based on R.L. Polk & Co. registration statistics. For additional information, 1-800-284-8584. © Subaru of America, 1991.

"Public investments in science and technology have been matched by federal dollars and continue to expand the extraordinary research knowledge network of the state. By every measure, New Jersey is the right place for investment, serving business in the age of high technology and information," says Dr. Jay Brandinger, executive director of the Commerce Department's Commission on Science and Technology.

COMPETING IN COMMUNICATIONS

AT&T's Bell Labs is a symbol for the practical business synthesis of scientific research and advancement produced almost daily throughout New Jersey.

New Jersey Bell plans to invest more than \$6 billion over the next decade in fiber-optic cable links that will make telecommunications and computer networks work faster and more efficiently than ever before.

"Our goal is to quickly bring the benefits of the information

age to consumers. We envision thousands of providers using our fiber-optic network to deliver a host of services that will invigorate the state economy and enhance the quality of life for all of us," says James G. Cullen, president and chief executive officer of New Jersey Bell.

Bell Atlantic, parent of New Jersey Bell, is backing this major high technology investment under a plan that would stabilize telephone rates. Not surprisingly, Bellcore, the central research and development affiliate of Bell Atlantic and the six other regional Bell operating companies, has headquarters in New Jersey.

Called Opportunity New Jersey, the fiber-optics plan will produce a statewide, fully digital, fiber-optic telephone and communications network by 2010 that will keep New Jersey at the competitive forefront with other states and other countries planning advanced communications network services.

HOME TO BUSINESS

Ninth in the U.S. Census, New Jersey ranks third in the nation in the number of corporate headquarters. In addition, nearly 2,000 domestic and international corporations maintain major facilities in the state in manufacturing, distribution, office financial service operations, and more.

Called the Garden



Governor Jim Florio is committed to keeping New Jersey working through business growth.

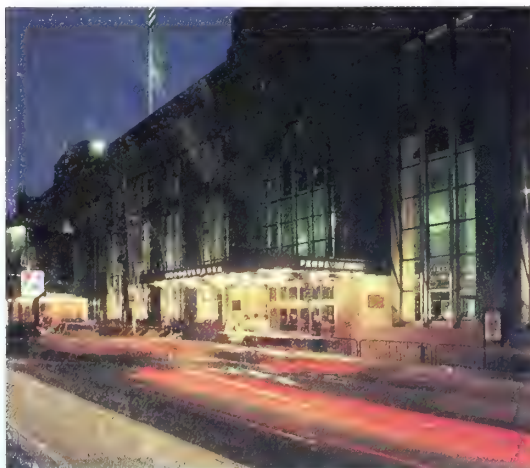
State, New Jersey is also the Manufacturing State, the Trade State, the Invention State, the Education State, the Research State and the Maritime State. New Jersey is the Transportation State, the Telecommunications State, the Pharmaceutical State, and the Tourism State, too.

Among the corporations with headquarters in New Jersey are American Cyanamid, a leader in health care, Nabisco, Automaton Data Processing, Campbell Soup, The Prudential (the largest insurance company in the nation), Volkswagen of America, Fedders (a name synonymous with air conditioning), and CPC, formerly Corn Products Company.

And there's the presence of AT&T. The world communications leader owns or leases 17 million square feet of space in New Jersey, where it is the state employment leader with 51,000 workers.

Public Service Electric & Gas Co., New Jersey's largest utility, has a 60-year tradition of finding the right location in New Jersey for business clients through site tracking, real estate coordination and economic and demographic research.

"We published 'New Jersey in the '90s,' a comprehensive detailed guide to New Jersey and its business advantages. At PSE&G we are participating in a wide range of public and private organiza-



Newark's Penn Station is New Jersey's passenger rail center for Amtrak and New Jersey Transit service.

ons and programs to address environmental planning and economic issues like permit reform and regulatory streamlining that shape business development. We are analyzing and finding ways to develop greater international business opportunities for New Jersey. We've responded to EC '92. Give New Jersey a fair shake, and in eight cases out of ten we can convince a corporation our state is the right location," says Steve Kukan, SE&G's general manager for area development.

Thomas R. Gibson, president and chief operating officer of Subaru of America, the company founded in 1968 by a group of local entrepreneurs as an American-owned and -operated import auto business, explains why it remains based in Cherry Hill, N.J., outside Philadelphia.

"Today, Cherry Hill still serves as the home for our regional headquarters even though at one point in our history we looked into relocating. We chose to stay for reasons that include access to our markets and an abundance of resources. But the major reason we decided to stay in New Jersey is the quality of the work force."

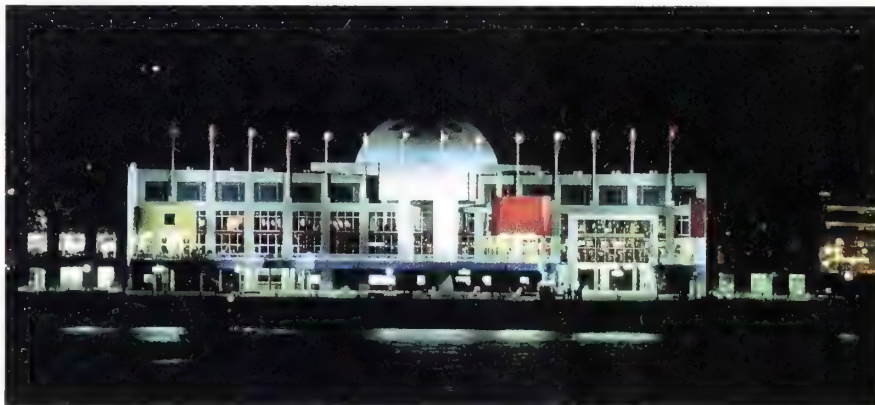
The pharmaceutical industry epitomizes New Jersey's corporate and business leadership. New Jersey is the nation's top producer of pharmaceutical discoveries and products. It is estimated that one quarter of the nation's research and manufacturing of health care products occurs in New Jersey.

Among 80 pharmaceutical firms in the state, industry leaders that make their home in New Jersey include Merck,

Johnson & Johnson, Schering-Plough, Bristol-Myers Squibb, Hoffmann-LaRoche, and Ciba-Geigy. Leaders in their industry, they are also leaders in the world of business.

It has been reported that a fifth or more of all pharmaceutical industry research and development investment in the U.S. is expended annually in New Jersey. Small wonder that the important new field of biotechnology, which is producing miracu-

struction of a 600,000-square-foot complex in Plainsboro near Princeton, where the company has its headquarters; Hoffmann-LaRoche is moving ahead with a \$120 million multi-disciplinary science building to be completed in 1994; Ciba-Geigy expects to complete a 440,000-square-foot life sciences building in 1993, when 300 employees will move from New York locations to join 2,800 other Ciba-Geigy employees in New Jersey.



A night view from the Delaware River spotlights the new, exciting New Jersey State Aquarium in Camden.

lous breakthroughs in human health and related fields, is heavily concentrated in New Jersey. Scientists at virtually every major pharmaceutical company in the state are creating and using molecular and genetic technologies to battle disease, and to create a new universe of prosthetic devices to restore the injured.

The scientific and facility needs of biotechnology R&D are cementing the pharmaceutical industry's commitment to New Jersey. At a project cost of \$300 million, Schering-Plough is completing a 1 million-square-foot Drug Discovery Facility; Bristol-Myers Squibb has started con-

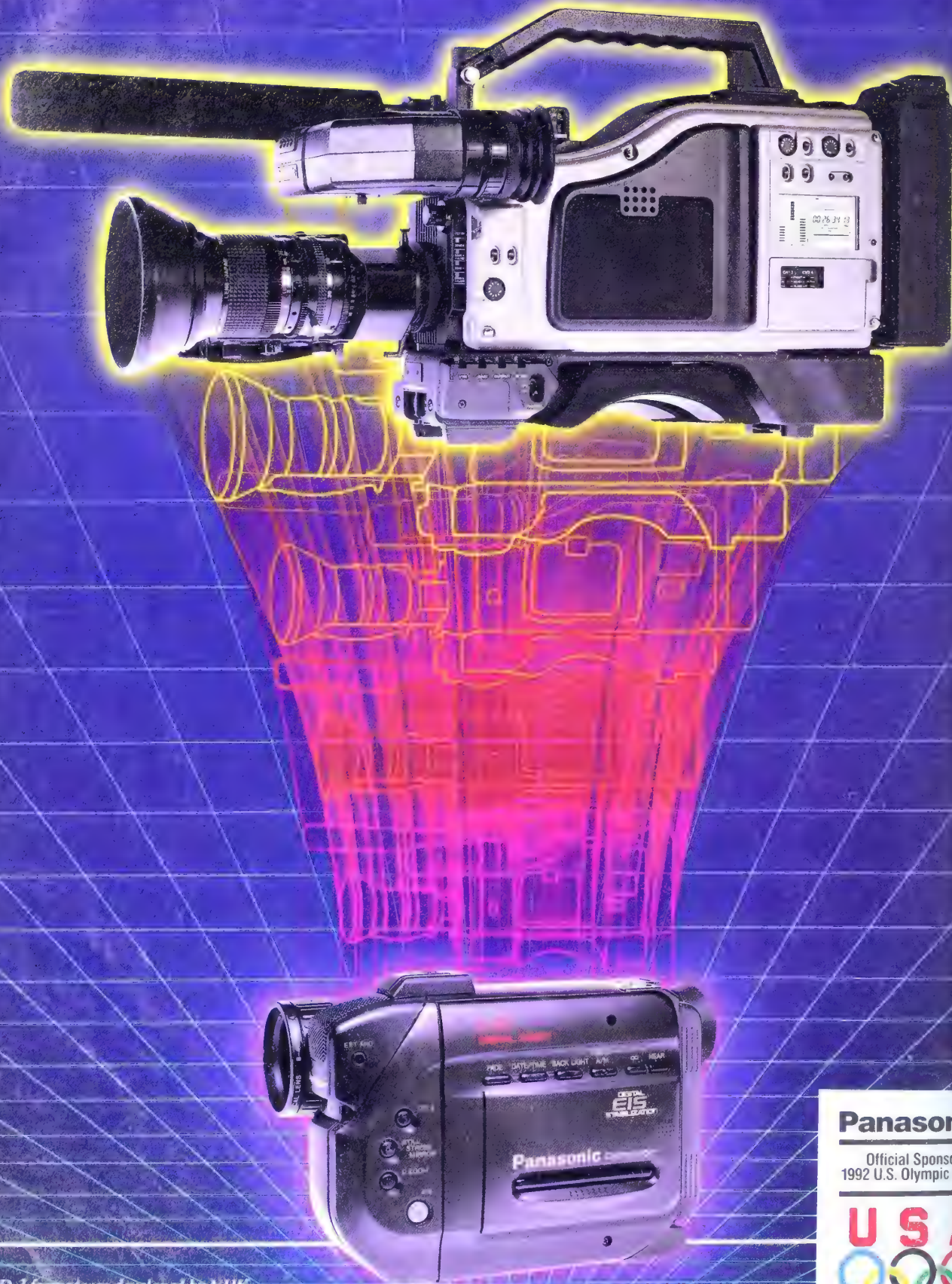
Expansion in New Jersey is hardly confined to the pharmaceutical industry. Chemical industry giant BASF Corporation with 11 locations in New Jersey is building a new northeast regional and corporate headquarters in the International Trade Center Office Park amid the rolling hills of Mount Olive Township in Northwest New Jersey.

FOREIGN TRADE ZONES

New Jersey also boasts three foreign trade zones: Mount Olive, Port Newark/Elizabeth within New York Harbor, and Port Salem on the Delaware Bay coast. The foreign trade zones are out-

Photo courtesy of Ciba-Geigy

Human Electronics—Technology for the Benefit of Mankind



D-3 format was developed by NHK

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Of all the triumphs at the 1992 Olympic Games, there's one you can experience in your home. Panasonic Digital Video Technology.

A pistol is fired. Bodies are set in motion. All eyes are focused on the Olympic athletes. Behind the scenes there's a grueling contest you won't see. Covering the Olympic Games requires the agility of an athlete. To help broadcasters like NBC, Panasonic introduced the D-3 1/2-inch Digital Video System. Its camera/recorder is small, light and allows for more spontaneous coverage. Since it's digital, its image has incredible quality. While Panasonic Digital Technology helps bring the excitement of the Barcelona Olympic Games to your home, it's also helped us develop a new camcorder for your home. One so small it fits in the palm of your hand.

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At the 1992 Olympic Games, world records will be broken. New standards of excellence will be set. But of all the triumphs, there's one you may not read about. But you'll see it and hear it every time you watch the Olympic Summer Games—Panasonic Digital Video Technology.

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Recorder and Digital Studio VTRs. They make keeping up with the quick-paced Olympic Games easy. And, with the D-3 system, tapes can be dubbed and edited without any video or audio degradation. The result is a sharper picture, better sound and improved coverage of the Olympic Games.

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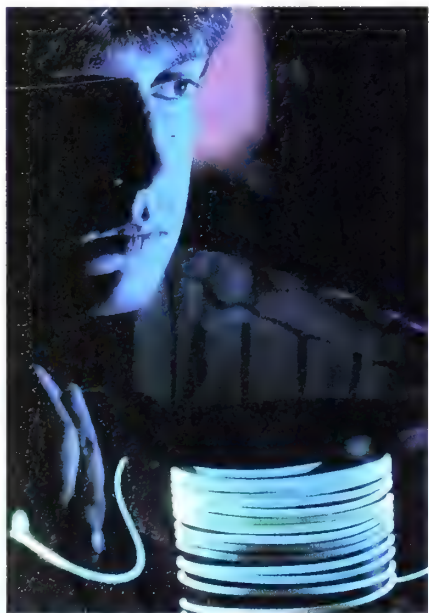
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side U.S. Customs territory. They offer business tremendous trade advantages and savings. In the foreign trade zones, a whole series of business activities like product manufacturing, assembling, and packaging can be accomplished free of import duties. No duty is charged until products are distributed to U.S. markets, while products that are exported leave the zones duty free.

The free trade zones are a major adjunct to New Jersey's maritime ports including Newark/Elizabeth, Salem, Camden, and Jersey City/Hoboken; and to air service



A researcher at AT&T's Bell Labs tests optical fiber.

to 23 overseas cities centered at Newark International Airport. In 1991, \$10 billion worth of New Jersey products and services were exported overseas. The volume of international cargo operations at Newark International has increased by 300% since 1988 as international flights into the airport tripled. The airport, operated

by the Port Authority of New York and New Jersey, is constructing a new \$20.8 million, 265,000-square-foot air cargo facility that will more than double total cargo capacity, and the Port Authority has announced it will build a new \$100 million overseas terminal.

"New Jersey is particularly well-positioned to garner an increasing share of U.S. world trade in the emerging global marketplace," says Richard C. Leone, chairman of the Port Authority. "One of New Jersey's important resources is the bistate Port Authority, where we have in place a multi-billion dollar capital improvement program. We are determined to preserve the historic position of the New York/New Jersey area as the leading gateway of the U.S. for international trade," adds Leone.

BUSINESS ON THE MOVE

"More and more businesses are finding that New Jersey is the place to locate," says Commissioner McConnell. "In recent years relocation to New Jersey from other states has averaged one company every four days."

One of the leaders in the move to New Jersey has been the financial industry. Lured by a favorable tax climate, by proximity to New York City's financial district, and by the availability of employees, many major financial institutions have put important operations in New Jersey.

In 1991, the American Institute of Certified Public Accountants chose the Harborside Financial



With 30 years in New Jersey, Sharp Electronics' North American headquarters is now in Mahwah.

Center in Jersey City, bringing 600 jobs to the Garden State. Merrill Lynch also made 1991 the year for a move to New Jersey announcing plans to occupy 600,000-square-foot new building on the waterfront in Jersey City where you can see the Manhattan skyline less than a mile away. Jersey City is only a four-minute ride from the World Trade Center via the Port Authority Trans-Hudson (PATH) rail line. Merrill Lynch cited favorable costs and location as the reasons behind the move that will bring 2,500 back office workers to New Jersey.

URBAN ENTERPRISE ZONES

The New Jersey Urban Enterprise Zones Act identifies 10 New Jersey cities and towns, including Newark, Trenton, and Camden where businesses will find distinct locational advantages. Some of the advantages are tax credits for new hiring, sales tax exemption rebates for unemployment taxes and eligibility for reduced utility rates. The cities are where businesses began in New Jersey and where business will continue to grow and prosper.

Text by Carl Zeitz, central New Jersey based business writer and consultant; communications and public policy Design by Parham Santana, Inc., NJ

CONSUMERS WILL NEED MORE FUEL THEY'RE TO FIRE THE RECOVERY

The central issues in the outlook right now are the strength and durability of the recovery. In trying to sort it all out, forecasters are keeping one eye on the data and the other on the weather.

An exceptionally warm February heated up several of the month's indicators, such as retail sales and housing starts, both key to prospects for a consumer-led upturn. But a chilly March is making some of the numbers—the economy—look cold. What's the real story? For the weather, and watch the labor markets.

Consumers are going to lead the recovery—as they have in the past. They will need steady growth in jobs and incomes. However, a new era of cost-cutting and corporate restructuring is keeping the growth of jobs and incomes below the usual recovery pace. So consumers will not have the same sway in this upturn that they have had in the past. That by itself precludes a strong rebound.

A consumer-led recovery is also harder because household income is assuming a greater role in spending decisions. A burst of new borrowing typically has added fuel to past recoveries. But this time, households are paying down debt at a record pace and show little inclination to add to their already burdensome debt loads.

Jobs and incomes are at the heart of the durability issue, as well. Consumer spending in the first quarter appears to have posted the strongest advance in four years. The problem is that incomes are rising only half as fast as spending, because payrolls in February were no larger than they were in December. If the economy fails to grow this quarter, the staying power of the recovery—and the recovery—will be in doubt.

WHIPS There are hopeful signs that job growth will turn up in coming months. Although the Labor Dept.'s latest report on the job markets showed that payroll employment added almost no growth in March after a big gain in February, the March workweek held at February's high level (see charts). Early in a recovery, longer hours usually lead to fatter payrolls. In the meantime, a longer workweek and rising hourly pay are lifting incomes. Nonfarm industries added 19,000 people to their work force in March, following a gain of 107,000 in February. However, because of a 122,000 decline in January, payrolls have not grown since December. In the early

months of past recoveries, it was not unusual to see monthly job gains in the range of 300,000 to 400,000.

Job growth was lackluster across the board in March. Only 48% of the 356 industries in the government's survey added workers, about the same percentage as in February. A reading below 50% means that most companies are either holding payrolls steady or laying off people. Indeed, excluding a 39,000 increase in temporary government jobs related to the Super Tuesday elections, private payrolls actually declined.

One plus from the labor markets is the recent speedup in the growth of the labor force. Its pace had languished during the past two years as the poor economy pushed many people out of the work force. But the labor force grew in March for the fourth consecutive month. The four-month pace was the fastest in three years—a sign of improving job-market conditions.

OUTPUT SHOULD BLOOM IN THE SPRING

However, companies are always cautious about taking on the added cost of expanding their payrolls. Given last year's false start on recovery, businesses are likely to be especially leery this time, and thus even slower to bring back laid-off workers.

A good sign is the longer workweek. In a recovery, companies usually try to get more output from their existing payrolls before they hire new people. The workweek for all nonfarm industries averaged 34.6 hours in both February and March, the longest in eight months.

Caution on hiring is evident in manufacturing. Factories had added 14,000 workers in February, the first increase in six months, but in March they cut 3,000 jobs. However, the factory workweek remained at February's level of 41.1 hours. These numbers suggest that industrial production rose a bit in March, but much less than the 0.6% gain in February.

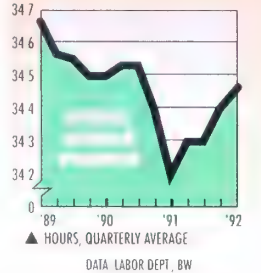
Auto output was a drag on manufacturing in March, but it will help in April and May. Based on Detroit's latest production schedules and the Federal Reserve's seasonal factors, car assemblies dipped about 4% in March from an annual rate of 5.4 million in February, but they are set to jump by about 12% in April and further still in May. That should lift overall factory output and jobs in the second quarter.

Car sales remained listless in March, at an annual rate

NG REMAINS ON HOLD...



...BUT THE WORKWEEK IS GETTING LONGER



Business Outlook

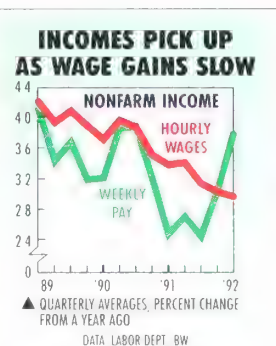
of 6 million, but that's still above the production rate so far this year. That means car inventories are low and will not stand in the way of a pickup in output.

Overall factory inventories are especially lean right now. They fell 0.3% in February, the fifth consecutive decline. And because factory shipments jumped 2.1% in February, the ratio of inventories to sales is unusually low. In fact, the ratio for durable goods was the lowest in nearly 13 years. This means that factories will be quick to expand output and payrolls as demand picks up.

CREDIT HAS BECOME AN ECONOMIC PARIAH

Despite the paucity of new jobs, wages continued to rise in March. The average nonfarm wage climbed by 0.4% in March—the same gain as in February—to \$10.55 an hour. Wages increased in all of the major industries, with construction pay posting a 1.1% jump.

Over the past year, hourly wages have grown by a modest 3%, down from the 4.2% rate hit in mid-1990, when the recession began. Wage hikes in manufacturing and in service industries have both slipped lower.



Such a slowdown in wage growth would seem to argue against any sustained rebound in consumer spending. But because companies have extended worktime by so much, weekly pay has picked up considerably over the past year. In the first quarter, weekly pay advanced by 3.8%—a faster pace than the 2.5% gain posted in the first quarter of 1991.

The longer workweek is one reason why personal income is rising at a rapid enough pace to lift spending without wage growth generating upward pressures on inflation (chart). That trend should continue in coming months. Better growth in hiring plus a long workweek

mean that income should remain on an upward track.

Not all of the extra income will go toward new spending, though. Households are likely to use some of the money to clean up their debt-laden balance sheets. That is one reason why the future gains in consumer spending will be modest compared with past recoveries. Consumers have already spent more than a year paying down their record amount of IOUs gathered in the 1980s and this practice shows no sign of abating.

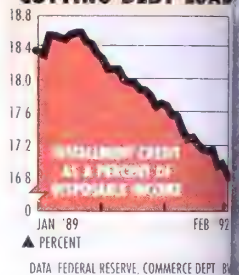
In February, total installment credit fell by \$199 million. Declines in mobile-home loans and auto financing offset a \$1.2 billion increase in revolving credit. In addition, home-equity loans fell by \$350 billion in February—another sign that debt accumulation is slowing.

February's increase in revolving debt—mainly credit cards—isn't surprising, given the jump in retail sales in that month. The expected retreat in March sales suggests that credit use also slowed. In general, consumers are treating debt as an economic pariah. That's unusual in the early stages of recovery when the prospects of new jobs and better pay raises usually spur people to increase their pace of borrowing.

This time around, however, households will be more interested in paying down their credit-card bills than laying down their plastic to make purchases. In February, installment debt as a percent of disposable income dropped to 16.8%, down from 17.7% a year earlier (chart). The ratio is now at its lowest in 6½ years.

Certainly, healthier balance sheets will play a big part in keeping the recovery on course, especially now that the economy seems poised for faster growth. But unless hiring accelerates and gives the economy a much-needed push, this rebound won't be able to pick up much speed.

CONSUMERS ARE STILL CUTTING DEBT LOAD



THE WEEK AHEAD

RETAIL SALES

Tuesday, Apr. 14, 8:30 a.m.

Retail sales likely slipped just 0.1% in March, says the consensus of economists polled by McGraw-Hill Inc.'s MMS International. However, the drop could be much larger because it will follow two huge jumps in retail sales: a 2.1% gain in January and a 1.3% advance in February. Auto makers already have reported weak car sales in March.

INDUSTRIAL PRODUCTION

Tuesday, Apr. 14, 9:15 a.m.

Output at the nation's factories, mines, and utilities probably increased by just 0.2% in March. That's suggested by a small gain in factory production workers

and the long length of the workweek. In February, industrial production increased by a strong 0.6%. With little change in output expected in March, the MMS economists forecast that operating rates last month stayed at their February level of 78.2%.

BUSINESS INVENTORIES

Wednesday, Apr. 15, 10 a.m.

Inventories held by manufacturers, retailers, and wholesalers likely fell by 0.3% in February, after a 0.4% loss in January. Factories already have reported a 0.3% drop in their stock levels for February. And the hefty increases in retail sales for January and February suggest that store inventories were drawn down significantly in both months.

MERCHANDISE TRADE DEFICIT

Thursday, Apr. 16, 8:30 a.m.

The foreign trade deficit probably narrowed a bit in February, to \$5.6 billion from \$5.8 billion in January. The survey says that exports likely bounced back after falling 1% in January. Imports, down by 1.4% in January, were flat in February.

HOUSING STARTS

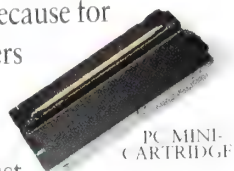
Friday, Apr. 17, 8:30 a.m.

Construction of new homes probably fell by about 4%, to an annual rate of 1.3 million in March. If so, that would be the first decline in housing starts since September. In February, starts soared 9% to a 1.3 million rate.

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A photograph of the General Motors Building at night. The building is a large, multi-story structure with a grid of windows, many of which are illuminated from within. The top of the building features a large, illuminated sign that reads "GENERAL MOTORS". The sky is dark blue, and the foreground shows a city street with some blurred light trails from cars and streetlights.

GENERAL MOTORS

THE BOARD REVEALS

BUSINESS AS USUAL WON'T CUT IT ANYMORE AT A HUMBLING GM

Cover Story



One day after General Motors President Lloyd E. Reuss received his excruciatingly public demotion, he arrived at work at 7:30 a.m. for an hour-long meeting with the auto giant's dealers. He spent the rest of the morning in meetings and tidying up his office on the 14th floor of GM's Detroit headquarters—getting it ready for his replacement.

That evening, Reuss gamely attended a dinner in his honor hosted by ESD—the Engineering Society. Beforehand, he described the Apr. 6 coup by General Motors Corp.'s outside board of directors as, ultimately, no big deal. Though GM Chairman Robert C. Stempel lost his post as head of the board's executive committee, "the basic strategy, the fundamentals, are laid out," says Reuss. "The board said: 'Hey, you weren't moving fast enough. You gotta move faster.'"

Stiff upper lip? Maybe. But Reuss's take on the shocking turn of events at the world's No. 1 auto maker barely describes the boardroom revolt. What's happening at GM is far more than a simple acceleration of a business plan to close down plants and shed tens of thousands of workers. After years of humiliating erosion in market share, rivers of red ink, and mind-boggling management miasma, General Motors has entered a period of seismic upheaval rarely seen in American business history.

'FRESH AIR.' "With the plant-closing announcements, we shook up the troops," says Robert L. Dorn, chief engineer for Cadillac Motor Car Div. "With this, we shake up the generals." Says Edward V. Regan, who as New York State's Comptroller controls a block of GM stock: "It's like opening a window and letting in fresh air." Fellow investors agreed, boosting the stock to around 38 on the announcement.

News of the GM coup sent tremors into almost every corner office in Corporate America. After all, if GM's normally docile board felt emboldened to wrest strategic control from management, the same could happen elsewhere. "This sends a great message to other companies," says Richard H. Koppes, general counsel at CalPERS, the California state pension fund. "For nonperformers, the status quo doesn't do" (page 35).

The driving force behind the board revolt at GM is John G. Smale, who in his nine years as CEO revolutionized consumer-products monolith Procter & Gamble Co. in the 1980s (page 33). When he persuaded the board to name him chairman of the GM board's executive committee, he effectively demoted Stempel and Reuss, the chairman's hand-picked No. 2. While a couple of days later Smale issued a statement vowing that directors won't "involve ourselves in the day-to-day business of GM," it's clear to those inside the company that the once-quiet GM directors will be monitoring Stempel's performance closely, regularly, and aggressively. One highly placed GM insider confides: "Smale will be dogging Bob's every step."

Suddenly, precisely who's behind the wheel at GM is an imponderable. To replace Reuss as president of GM, the board promoted John F. "Jack" Smith Jr., 54, the former chief of GM's international operations. William E. Hoglund landed the job of chief financial officer, shunting aside Stempel's CFO, Robert T. O'Connell. With a try at boardroom civility, the directors officially claim that Stempel recommended the changes. Their rationale for the upheaval was simple: "Regaining profitability requires a more aggressive management approach to remove excess costs."

But Smith and Hoglund now are clearly positioned to take on GM's No. 1 and No. 2 jobs—if Stempel can't cut it. Board members are "girding themselves for the medium- and long-term battle," says Richard D. Recchia, executive vice-president and chief operating officer at Mitsubishi Motor Sales of America Inc. "They are picking the gladiators."

Inside GM, "there were a lot of phone calls going back and forth Monday night," said Shirley Young, vice-president for consumer market development. Indeed, a day after the news broke, GM spokesmen still weren't sure whether Stempel was still on the executive committee (he is). And more shuffling will follow, including putting someone in charge of GM's \$23 billion components operations.

But, like tectonic plates inexorably moving toward an earthquake, pressure for upheaval at GM has been slowly mounting for years. Belatedly, GM's board became restive last fall. The deep

**'With the
plant-closing
announcements,
we shook up
the troops.
With this,
we shake up
the generals'**

THE DOOMED TARRYTOWN (N.Y.) PLANT: STEMPEL'S PLODDING CAPACITY-CUTTING WAS JUST ONE IRRITANT TO THE BOARD

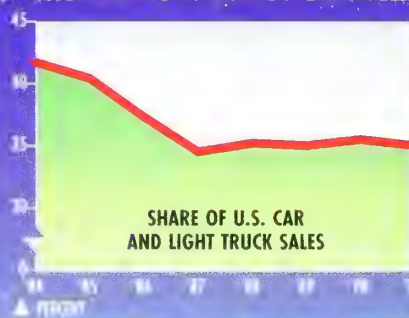


GM'S CHRONIC PROBLEMS:

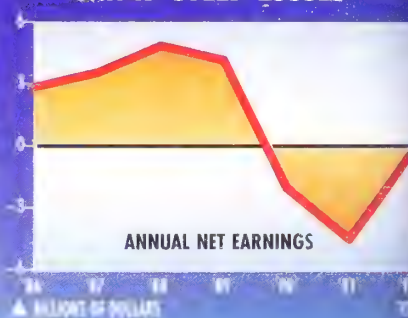
SLOW PRODUCTIVITY GROWTH...



...SINKING MARKET SHARE...



...AND STEEP LOSSES



slump in auto sales had driven 1991 losses for the full company to a stunning \$4.5 billion. North American operations alone had accounted for a full \$7.1 billion of red ink, with overseas and non-auto operations trimming the losses. Worse, the company's U.S. market share is stagnant at 35%, despite an avalanche of new cars and trucks, and remains under pressure from unforgiving rivals (charts).

REGULAR MEETINGS. Suddenly, Smale became seriously alarmed. A 10-year veteran of GM's board, he had watched the company's decline without taking action. But by Thanksgiving, he began talking to GM executives about the company's strategy and management. Other directors set up sessions with outsiders, including Wall Street analysts, looking for their take on what to do about GM's chronic woes. Regular meetings between directors began to take place—conspicuously excluding inside directors.

As the weeks passed, board members became even more worried about Stempel's lack of drastic action to halt the losses. A 34-year GM veteran, Stempel is a consensus builder who abhorred the pain and dislocation caused by a largely unsuccessful reorganization of GM in 1984 by his predecessor as chairman, Roger B. Smith. Stempel, analysts, competitors, and GM insiders agree, failed in this test of leadership. "GM is a powerful company, but they weren't clearly directing that power," says competitor Yoshikazu Hanawa, executive vice-president of Tokyo's Nissan Motor Co. "If some turn right and some turn left, a company can't move forward."

The board also was worried about Stempel's staunch support for Reuss, who, as chief of the North American unit since 1986, had to take responsibility for the division's huge losses. In some ways, Stempel's relationship with Reuss may have been the most glaring

symptom of the long, debilitating disease that has made GM the laughingstock of Corporate America. Without sufficient regard for merit, managers got ahead as their buddies got ahead.

As far back as 1990, when Stempel was named chairman, the board had suggested he name someone else as No. 2. Yet Stempel insisted on his longtime colleague, and the board acquiesced, although it refused to grant Reuss the chief operating officer title. But finally, with Reuss's operation foundering, many directors began clearing for his ouster. Just weeks after Stempel was loyally denying rumors of Reuss's departure. "Lloyd's my man," he said.

Meanwhile, financial pressure on GM kept mounting. GM's sales kept falling short of Reuss's rosy forecasts, and it was having to pare back on projected production for the fourth and first quarters. On Nov. 8, Standard & Poor's Co.

commercial paper issued by GM's financing arm under review.

month later, as GM shares sank below a four-year low, the board met and Stempel to push ahead with a downsizing of GM. On Dec. 18, Stempel announced a partial plan that included the closing of 21 plants and the elimination of 74,000 jobs. Then, in a second announcement in late February, Stempel sketched out plans to cut duplication and overhead by reorganizing the company's three car and truck operations into a single North American unit. The board liked the plan but was concerned about the pace with which Stempel would phase it in. He figured the job couldn't be finished until 1996.

ON AT EDS. By Sunday, Apr. 5, the board met in Dallas for a final time. Outside directors concluded that Stempel had had enough. The next day, in a final board session, they forced Stempel out of his hand. Ironically, the board rejected the sprawling headquarters of the Electronic Data Systems unit—the headquarters of Ross Perot, the executive ousted by the board in favor of his outspoken criticism of GM management and now a possible Presidential candidate. At 5:45 p.m. Eastern Time, GM told the world.

The man in waiting at GM is Jack Smith. As COO, Smith must move quickly to take over GM's North American car operations, which were widely credited with starting the turnaround of GM's now highly profitable European unit. "We were in bad shape until" he took over, recalls one GM executive.

As a financial expert, Smith is well-known with many operational feats, including forcing costs down in Europe, boosting output without adding new plants through innovative deals. He's known as low-key and demanding. "If Jack Smith asks for a problem fixed, he doesn't want a 30-page report on why the problem isn't be fixed or why it's not a problem. He wants it fixed. Period," says Goldman Brothers analyst Joseph S. Smith.

From the start, Smith seemed to be steering GM's reorganization out of trouble. On Apr. 7, the day after the announcement, he put him in charge of operations, and replaced back a GM manager posted to Mexico to fall to head the company's Mexican subsidiary. His new job: vice-president for finance at the North American operations.

For all these things, Smith will almost surely be the GM's white-collar staff. Even Cadillac admits that in manufacturing, the biggest cost is in management, and Smith wants to tackle that. "Indeed," says analyst Maryann N. Keller of Fidelity Inc. estimates that GM has 30% too many white-collar workers. "I



SMALE "WOKE UP A SLEEPING GIANT" AT P&G. CAN HE DO IT AGAIN?

HE CAME, HE SAW, HE OVERHAULED

John G. Smale is some fisherman. On a trip to Florida, the now retired Procter & Gamble Co. chairman reeled in the biggest tarpon caught in the state that year, says fishing buddy Bill Portman, who marvels that "his ability to cast into a heavy wind is unbelievable."

Casting into gales is a skill Smale, 64, can use in his new job as chairman of General Motors Corp.'s executive committee. It's a talent he has shown in business before—while shaking up P&G. During his tenure at the consumer-products giant, Smale overhauled management, made profits a priority, and moved P&G into new markets. The result: During Smale's nine years as CEO, earnings nearly doubled, to \$1.2 billion on \$21 billion in sales. Says Prudential Securities Inc. analyst Andrew Shore: "He woke up a sleeping giant."

When Smale took P&G's helm in 1981, growth was sluggish. To speed things up, he moved P&G heavily into the health and beauty markets with big deals for Richardson-Vicks Inc., the cough-drop maker, and Noxell Corp., the marketer of Cover Girl cosmetics. Simultaneously, Smale drove P&G into dozens of new countries.

'A LOT OF GUTS.' By the mid-1980s, though, few were singing Smale's praises. Hammered by competition in such key products as detergents and diapers, the company saw its first profit decline in 32 years. Even Crest, which marketer Smale had turned into the No. 1 toothpaste brand in 1960, was in danger of losing its top ranking.

P&G, it was said, was a rusty marketing machine. So Smale cast into the

wind. Before his retirement in 1990, Procter recaptured lost market share by extending its big brands, producing Tartar Control Crest and others. To make the strategy work, Smale shook up P&G by speeding up development and enlivening advertising. He also renovated management. "That took a lot of guts," says retired P&G executive David S. Swanson.

For shareholders, Smale's best contribution was probably his drive for profits. To build earnings, P&G began rewarding managers producing profits. "He got them to think poor again," says Hugh S. Zurkühlen, an analyst at Weiss, Peck & Greer.

Smale also departed from the lifetime employment guarantee that employees had come to expect. He trimmed staff, weeded out marginal performers, and closed down plants.

None of that helped his reputation in the ranks, where he is remembered as a solid strategist but cold and aloof. Associates, however, say Smale is no colorless tough guy. "He has a game face and a personal face," says retired P&G Vice-Chairman Thomas Laco, "and his business face is all business."

Much of his bad rap may be the result of simple shyness. That's what students who studied under him last fall at his alma mater, Miami University in Ohio, say. Smale is "not aloof so much as reserved," says graduate student Marty Hogan, who notes that Smale sent a get-well note to a student hospitalized for a back problem. Aloof, reserved—whatever. Smale has shown that he knows how to make his mark.

By Zachary Schiller in Cleveland

may be misinterpreting this, but when I read between the lines, it seems to me the board is saying they're going to be doing some serious cutting at the upper levels instead of the people in the plants," says Russell W. Cobb of United Auto Workers Local 10, which represents the company's Doraville (Ga.) Oldsmobile Cutlass Supreme plant.

While continuing to cut plants, Smith also must boost the company's manufacturing efficiency at those that remain. Virtually every plant has a different-style paint and body shop, and the company is just beginning to convert its manufacturing processes toward a common standard so that one plant can build a variety of models.

HIDDEN STRENGTHS. GM has also been plagued by production snafus. The company's popular Saturn small sedans and coupes are flying out of showrooms, now selling at a dizzy pace of more than 16,000 cars a month through just 155 outlets. But GM has only a 30 days' sup-



LLOYD REUSS WAS DEMOTED, AND JACK SMITH REPLACED HIM AS PRESIDENT OF GM



ply, in an industry where the norm is closer to 60 days'. Nearly two years after the launch of production, Saturn's plant still is not up to full capacity. Similarly, production problems at the plant that builds the hot Cadillac Seville and Eldorado have held back deliveries of cars that bring GM profits of more than \$10,000 apiece.

While Smith tends to cars, CFO Hoglund will watch the balance sheet. Hoglund is well regarded within GM—and is known as an executive whose career had been sidetracked by Stempel. Hoglund, like Smith, started in finance and then

moved through a series of operational posts.

Then there's Smale. He brings a firsthand acquaintance with turmoils to his position as chairman of the executive committee, a kind of miniboard comprising the chairmen of all board committees. In his previous career, he reshaped P&G from a paternalistic, lumbering operation to a profit and new-product powerhouse. Procter swallowed losses of \$2 million and fought through numerous mistakes before, under Smale, P&G's Japanese unit turned into a fast-growing, \$1 billion-plus dynamo that aggressively takes the battle to Japanese rivals on their own turf. Says an admiring consumer-products analyst: "Take a look at the way Procter was perceived in the early '80s: big, lazy, stodgy, sleeping giant, insulated by size. The same as GM."

And Smale has proved himself willing to make the tough calls. His final call: After grooming John E. Pepper as his successor for five years, he decided to

'IT'S NOW BECOME A WE-THEY SITUATION'

Betrayal. Humiliation. Loss of face. That's what General Motors Corp. Chairman Robert C. Stempel may well be feeling as he comes to grips with the tough task of moving forward. The entire organization could suffer if Stempel can't handle the extraordinary strains of his new status.

"He's in a painful and difficult spot," says Harry Levinson, a well-known management psychologist. "He's been put on probation, and that has to make him angry with himself and the board for having done it to him. It's embarrassing in front of God and everyone else."

Stempel certainly isn't the first big chief executive to have his knuckles publicly rapped by a board of directors, but he is one of the few to survive—which may be worse than dismissal. "He must feel a tremendous sense of betrayal, because suddenly his trusted group of advisers has turned on him," says Jeffrey A. Sonnenfeld, director of

Emory University's Center for Leadership & Career Studies. "While he may not make it adversarial, it's now become a we-they situation."

Infighting could heighten the tension. "Inside, there's the potential of choosing up sides: 'Do you go with [GM President and Chief Operating Officer John F.] Smith or with Stempel?'"



STEMPEL: INFIGHTING COULD HEIGHTEN THE TENSION

says Thomas J. Neff, president of executive search firm Spencer Stuart Associates. "This is where Stempel has to pull out every bit of leadership."

Leadership, in this case, may mean cutting against the grain of long-established loyalties. GM executives "all lie together in Grosse Pointe [Mich.]," Levinson notes. "You grow up with them." Stempel will have a break out of behavior established over a lifetime—or pay the price. "If he acts to please the board," says Levinson, "that means he's going to be acting against his brothers. If he doesn't act, then the board will get someone else." Advice for a shamed CEO? "If he feels he's a wronged victim of an impatient board, he shouldn't admit it," adds Sonnenfeld. In fact, he should act like President Bush after Pat Buchanan's New Hampshire sting. "He should join the critics and say: 'I've gotten the message. It's time for more aggressive change.'"

By John A. Byrne in New York

A WAKE-UP CALL FOR CORPORATE BOARDS

is good for General Motors is good for the country, and what's good for the country is good for General Motors.

The late General Motors Chairman Charles E. Wilson would no doubt be astonished that his famous remark, made in 1952, is so applicable—in an entirely different context. Wilson then was commenting on the dominance of the U.S. economy. The words ring true because of the radical steps GM's board took on June 6: When outside directors reorganized the company's executive and structure, they set an example that should prompt the boards of other performing companies to take action sooner rather than later.

That, in turn, could reverse Corporate America's slide. In recent years, as overseas rivals have grown more agile, American corporations have seemed to be lagging and misdirected. With GM a prime example. As a remedy, experts prescribe better oversight, whose monitoring can instill discipline and accountability—now, perhaps with GM a precedent. **FOUND.** "If it can happen at GM, it can happen here. Corporate governance will never be the same," says Thomas J. Spencer, president of executive recruiters Spencer

& Associates. Agrees a top corporate attorney: "This is truly momentous—it's the culmination of the corporate governance movement to make sure directors perform."

The events at GM really merit all this fuss? The company, after all, has been losing money and market share for years, making investors mighty displeased. With good reason, many would say the board should have acted long ago. And directors only did what they were supposed to do: monitor management's performance, make changes when necessary, and generally watch out for shareholders' interests.

GM is a standout case—it's huge, long-lived, and long dominated by insiders who created a supine board.

That only magnifies the shadow GM's outside directors cast when they suddenly declared their independence—even if it was long overdue.

And while it's true that boards in recent years have been quicker to replace bad managers, the numbers are deceiving. In more cases than not, "the company was bankrupt, was going bankrupt, or there was skulduggery, legal or moral," says Jay W. Lorsch, a Harvard University business school professor and author of *Pawns or Potentates: The Reality of America's Corporate Boards*. Now, though, GM provides a model for boards where the issues are not so extreme.

Activist shareholders get much of

at GM, they may also be emboldened by the reaction of some corporate leaders. "We were totally embarrassed by GM—it gave the rest of us fits," says one top chief executive. "I couldn't be happier that this happened." Others, too, privately express their dismay that the star-studded board didn't demand better performance from GM's management long ago. Like just about everybody else, executives are troubled about the performance of American corporations and, naturally, blame those in charge.

PAINFUL WAIT. The tragedy may be that the board waited so long. "If they had done this [years ago], when the company had billions in the bank, they would have saved jobs for employees and money for shareholders," says former Securities & Exchange Commissioner Joseph A. Grundfest.

There are other reasons the events at GM are a watershed. "Significantly, this went beyond Stempel into lower-level managers," notes Dale M. Hanson, who as chief executive of the \$68 billion California Public Employees' Retirement System has lobbied GM hard for change. "The board is playing a little bit of kick-ass, and that's good."

Corporate America has a long way to go before boards truly perform as they should. Big-company culture discourages contact

between shareholders and directors and among outside directors themselves. Traditional corporate structures, which combine the roles of chairman and CEO and allow the CEO to set the board's agenda and to make assignments to committees, work against board intervention. So do many other practices, such as retaining former CEOs as directors and permitting CEOs to choose their successors.

But GM's experience shows that change is possible even at the stodgiest, sleepest companies. As such, it marks a milestone in corporate governance that should, in the end, lay some groundwork for making U.S. companies more successful—and the nation more competitive.



the credit for the new attitude of GM's board. With letters to directors and shareholder resolutions (as well as talks with management), investors have been demanding better results. GM Chief Executive Robert C. Stempel probably sealed his fate last fall when he failed to deliver a visionary long-term plan, instead putting forward a minimalist program to move the company to break even. Outside directors seemed simply to lose patience. They decided to begin meeting separately—and then to take action. Having tasted success at a company such as GM, investors are likely to step up the fight elsewhere in Corporate America.

If directors at other companies can take courage from the board members

pass over Pepper and named international-operations chief Edwin L. Artzt to fill his shoes.

This new management does have one big advantage: recent, drastic improvements in its line of cars and trucks. They now lead Japan's in safety and, amazingly, fuel efficiency. Although they still trail overall in defects, quality is fast becoming a toss-up. "They've improved

quality tremendously," says J. David Power III, president of J. D. Power & Associates. "But there is still a lot more that has to be done to get them competitive with the leading Japanese makers."

Now, GM must get the word out on its strengths. Says Hugh Fiore, owner of Harbor Motors Inc., which sells Oldsmobiles, Pontiacs, and GMC Trucks in Old Saybrook, Conn.: "We've got to make

people feel they want a Cadillac in the driveway instead of a Lexus."

Where does all this leave Stempel? Hurting, it seems safe to say, although he insists he's with GM for the duration. But if he fails now, like a lot of other employees, Stempel figures soon to be out of work.

By James B. Treece in Detroit, with bureau reports

IT CAN'T HAPPEN HERE, CAN IT?

Five companies where investors are displaying discontent

Will GM's boardroom uprising prove contagious? James E. Heard of proxy adviser Institutional Shareholder Services Inc. thinks so. "Boards are increasingly aware that they can't just be reactive to management," he says. Some boards have more to do than others. Here's the situation at five companies whose performance has provoked investor ire:

IBM With each passing year, IBM's warts have become more apparent. The biggest: its failure to stay ahead of the computing revolution wrought by the microprocessor. IBM has clung to its mainframe business even as cheaper alternatives have emerged. When Big Blue finally began to realize the potential of superpowerful PCs and networks, its slow-moving bureaucracy deadened its ability to respond.

Since 1985, Chairman John F. Akers has shed 60,000 employees, closed plants, and rejiggered U.S. operations. Now, he's leading an ambitious plan to carve IBM into quasi-independent units, each focusing on a particular market. All that hasn't done much for investors, who from 1987 to 1991 saw a -9.2% total return. Sound like GM? No wonder it's on California Public Employees' Retirement System's list of poor performers. Still, "Akers has the board's full support," says a spokesman. Most observers agree. But he's on a red-hot seat.

digital Its market value has dropped by \$19 billion in four years, executives are bailing out, and despite a recent shakeup, Digital Equipment Corp. suffered its first-ever operating loss in the December quarter: A \$147

million whopper. That doesn't seem to faze DEC founder and President Kenneth H. Olsen. He hasn't replaced the chief financial officer who left in December, and he dismisses the other departed executives as people who simply aren't team players.

But don't look for any action by the board of the \$14 billion minicomputer maker. Olsen, 66, may be the board's only insider, but he hand-picks its members. Directors include his college mentor and the retired CEOs of two companies where Olsen is a director. He refuses to establish a succession plan and last year chastised a board member who advocated one. Says Sherwood Securities Corp. analyst Stephen C. Dube: "To me, there's an inertia there." DEC insists that its board is plenty strong.



Kodak definitely could benefit from a GM-style boardroom coup, insists Prudential Securities Inc. analyst B. Alex Henderson. "I don't see it happening," he says, "but I sure wish it would." The reason: Eastman Kodak Co. has restructured its operations four times since 1982 and has yet to show a consistent earnings improvement. Last year, it took a \$1.6 billion restructuring charge and wound up with profits way below Wall Street's expectations.

Kodak CEO Kay R. Whitmore has held that job only since 1990 and appears to have the board's support. But he may be thanking his stars that the board no longer features John G. Smale, the former Procter & Gamble Co. chairman who engineered GM's upheaval. Smale left Kodak's board in 1987 when the company bought Sterling Drug, which competes with P&G. As for Sterling, it's one of Kodak's laggards.



Barely a week goes without someone on Wall Street predicting the imminent demise of Jans D. Robinson III. Since Robinson has been CEO of American Express Co., its flagship card division has faltered badly, and retail stock-brokerage house has been a source of unending headaches and unpleasant financial surprises.

Yet "Robinson is still in pretty firm control" of the board, says Ned Day, an analyst at Gerard Klauer Mattison Co. He counts among his supporters such heavyweights as former Secretary of State Henry A. Kissinger and Union Pacific Corp. Chief Executive Dr. Lewis. That's not to say there aren't a few gadflies among the directors. "If another large policy decision goes wrong, I think the board would ask him to step down," observes Tony Hitschler, president of Brandywine Asset Management, a large AmEx shareholder. AmEx says only that the directors are "fully informed" and active.

SEARS

Results improved at Sears, Roebuck Co. in 1991, but shareholders want more from the \$57.2 billion retail and financial-services giant. Chairman Edward A. Brennan can't budge Sears' turn on equity past 10%, and despite layoffs and continuing reorganizations, the \$31.4 billion retail group, its costs are still too high and its market share keeps eroding.

Investors are up in arms. A proxy resolution to be voted on in May would split the chairman and CEO posts—Brennan holds both—and install an outsider as chairman. Another advocates an independent study of breaking up the company. Will Sears' board challenge Brennan? "If there was any hope, it would come from Donald Rumsfeld, but we haven't seen any action," says Richard Koppes, general counsel of the California Public Employees' Retirement System, which holds 2 million Sears shares. Rumsfeld, the former chairman of G. Searle & Co., won't comment. Sears says it has an active and vocal board.

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ONE SICK CANARY

Bankers are all too aware of the wharf's shortcomings

Last April, organizers of the London Marathon were persuaded to re-route their annual race through the vast office complex taking shape at Canary Wharf. To showcase the development, workers moved at double time to put in roads and plant daffodils. Paul Reichmann, Canary Wharf's top landlord, was so impressed by the sight that immediately after the race, he ordered that the sprawling 71-acre development be opened to the public within a week, two months ahead of schedule.

It was vintage Reichmann, reflecting his intimate involvement with Canary Wharf. Ever since the Toronto-based mogul took a dilapidated stretch of riverfront property off the hands of its first developer nearly five years ago and began building Europe's largest office complex, Reichmann has poured heart, soul, and pocket-book into Canary Wharf. Olympia & York Developments Ltd., the company he and his brothers control, has invested \$3 billion in the project.

'EATING CASH.' But it's becoming clear that Canary Wharf isn't the sterling asset that Paul Reichmann envisioned. And that's worrying the bankers from 100 or so institutions who plan to gather on Apr. 13 to begin restructuring upwards of \$15 billion they have lent O&Y. "This project is eating cash," says one banker. Overhanging the Canary Wharf development are construction loans totaling \$1 billion and the \$700 million that O&Y pledged toward a proposed new

subway line. Exacerbating the cash-flow squeeze are various lease obligations that O&Y assumed to lure many tenants from their previous offices. And the talks won't be made easier by the likely departure, first reported by *The Financial Times*, of former Manufacturers Hanover President Thomas Johnson, from his role as O&Y's chief negotiator. Add it all up, and it becomes

THE FIRST PORTION OF THE WHARF IS IN A CASH BIND



BILLIONAIRE LI MAY BID FOR SOME O&Y ASSETS

increasingly likely that much of Reichmann's dream project will never get off the drawing board.

Instead, when talks begin, O&Y and its bankers will probably have to concentrate on propping up the portion of Canary Wharf nearing completion. There is a short-term need for cash to meet operating expenses, though the exact numbers are not yet known, say bankers. Hong Kong billionaire Li Ka-shing has said he's interested in bidding for some O&Y assets. But real estate analysts think Li's most likely targets are O&Y's New York and Toronto office towers. Last October, Li purchased a 49% stake in one of O&Y's troubled New York buildings.

That means O&Y's banks may have to step in, effectively taking control of the project. O&Y and its advisers will be offering a raft of proposals, from extending debt repayment schedules to turning over buildings to the banks. Banks may take equity positions in buildings, swapping uncertain debt payments from O&Y for the more certain cash flow they

could get from renting the properties out themselves. Banks also are likely to consider seeing out and lending to new tenants to help them buy their buildings. Many of the proposals have been on the table for some time. Only now, says Robert Speirs, finance director for the project, "the need [to move on this] is a little more urgent."

BIG GLUT. The trick will be how to value the buildings at a time when the London property market is in its worst depression since World War II (table). Rents have plunged 35% in Central London from their peak two years ago, estimates analyst John W. Atkins of UBS Phillips & Drew. He forecasts a further 18% drop this year, and 12% in 1993. The scene was made worse by a building spree by other developers who hoped to thwart the potential threat of Canary



CANARY WHARF'S WOES

REAL ESTATE DEPRESSION London has suffered through a two-year decline in property values, with rents down 35% and vacancies up to 20%. A likely rise in interest rates would just make matters worse

OVERBUILT MARKET There are 33 million square feet of property available in London, making Canary Wharf far less attractive than in the boom years of the 1980s. And a subway line won't serve the area for several years—if then

POOR CASH FLOW Canary Wharf is only 60% leased, and the Reichmanns lured many tenants with discounts on rent. Bankers will have to infuse cash to meet operating expenses, assumed leases, and other costs

DATA BW

In fact, real estate planning officials in the City of London actively ended construction by relaxing the strict building requirements. The price of any overall deal seems to include a postponement, at least for any development beyond the 4.8 square feet now well under way at Canary Wharf. That would seem to end to the Reichmanns' vision of development measuring 13.9 million square feet by the end of the decade. Further complicating the Canary Wharf talks is political uncertainty in London. A firm and quick decision will be

needed on the proposed \$2.3 billion Jubilee subway line, due for completion in 1996 and essential to entice new tenants. Strongly backed by the Conservative Party, the new line has won only lukewarm support from Labor.

SAME OLD SONG? Banks and O&Y executives are likely to warn the next government that cancellation of the line would deal a fatal blow to the entire project. What's more, the government may come under increased pressure to relocate some of its major departments from elsewhere in London to Canary Wharf in an effort to trigger a new

wave of tenants into the development.

Paul Reichmann himself has actively courted the government in the past and succeeded in convincing former Prime Minister Margaret Thatcher that Canary Wharf should be the centerpiece of a decade-long effort to reinvigorate the Docklands. Now, as he gears up to meet his creditors, Reichmann is clearly betting that the interests of the government, the banks, and O&Y are so intertwined that Canary Wharf can't be allowed to fail.

By Richard Melcher, with Sana Siwolop, in London

Commentary/by Wendy Zellner

MR. SAM'S EXPERIMENT IS ALIVE AND WELL

the days since Sam M. Walton's death on Apr. 5, investors, analysts, and even employees of Wal-Mart Inc. have been wringing their hands and wondering: Will the world's largest retailer ever be the same?

Yes, and you know, that's just how Sam wanted it. One of the marks of Wal-Mart is that its growth to eye-popping levels—more than 2,000 stores in the United States and an estimated \$55 billion in sales this year—hasn't been hindered by the bureaucracy and inefficiency that has crippled other corporate behemoths. "To this day, as big as Wal-Mart is, it changes its strategy every week," says Richard L. Berry, director of the Center for Retail Studies at Texas A&M University. And while the company's culture instilled by Sam and Wal-Mart's legendary founder can't be copied, other companies like General Motors and IBM can learn from their pinstripes and mistakes and still learn plenty from the folks in Arkansas.

FOR ACTION. The first lesson is the mantra Walton passed on to every employee at Wal-Mart, from Chief Executive Officer David D. Glass to the lowliest clerk: "a bias for action." That translates into an expectation to change and act daily, even on the smallest details. Department managers in the district stores are expected to act as entrepreneurs, each running his or her business. And they're given the right and information they need, from profit-and-loss statements to inventory turns. Glass estimates that department heads conduct some 250 experiments, most of them secret, in Wal-Mart stores on any given day. Some of

them pay off big: The greeters who welcome shoppers to Wal-Mart and offer them a shopping cart may seem corny, but they're cited by many customers as a major reason why they keep coming back.

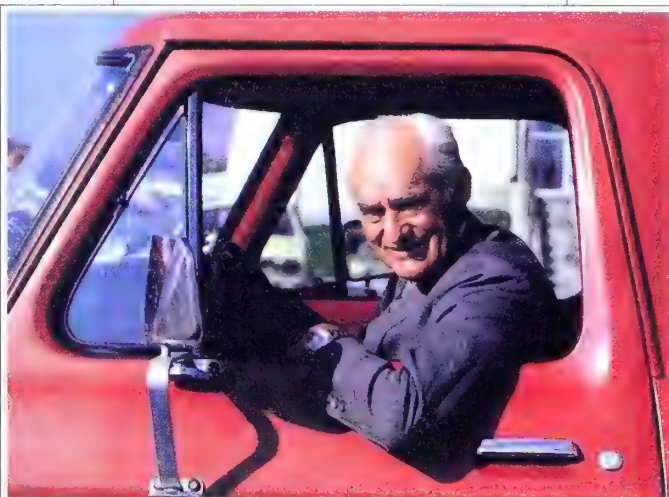
One Wal-Mart director described Walton's penchant for constant tinkering

everything from baby food to tires. Three years later, it essentially abandoned the concept when the stores didn't hit the target for return on investment. "Let's not analyze and research something to death, that's Wal-Mart's philosophy," says consultant Peter E. Monash, who helped set up the hypermarkets.

Still, the experiment has prompted Wal-Mart to create smaller "Supercenters," which sell both groceries and general merchandise. That scaled-down approach, which could turn Wal-Mart into a powerful force in the grocery business, seems to be paying off. Glass plans to add some 15 Supercenters this year to the 9 already in operation, mostly in the South and Midwest.

CRAMPED QUARTERS. In other words, Glass is learning from his mistake. Insecure people (read bureaucrats) would prefer to find a scapegoat. No wonder Walton made bureaucracy his sworn enemy. And before attacking it in his stores, he rooted it out of his headquarters in Bentonville, Ark. No glitzy Sears Tower here. It's more like a cramped warehouse. Executive offices are purposely uninviting, since managers are expected to be out in the field.

The only constants at Wal-Mart are a few deceptively simple principles: The customer is the boss. Employees and suppliers are partners. Managers are servants. And costs must be driven down to keep prices low. If Wal-Mart's managers, including new Chairman S. Robson Walton, Sam's son, can stick to the founder's gospel, everything—and nothing—will change.



MISTAKES NEVER BOTHERED WALTON—UNLESS THEY WERE MADE TWICE

ing as his "ready, fire, aim" approach. Of course, nobody hits the target every time. But get this: At Wal-Mart, people aren't punished if their experiments fail. "If you learn something and you're trying something, then you probably get credit for it," says Glass. But woe to the person who makes the same mistake twice.

Walton and Glass have stumbled themselves. In recent years, Wal-Mart started up its own line of discount drugstores and arts-and-crafts outlets. Both chains were sold when they failed to meet Wal-Mart's lofty expectations for profitability. Wal-Mart jumped into the "hypermarket" business in 1987 with 225,000-square-foot stores selling



PLANT PROTEST IN AURORA, ILL.: RESTAFFING FACTORIES COULD TAKE MONTHS

CAT GETS ITS BACK UP. WAY UP

If it replaces strikers, it will lay down a major challenge to the UAW

Say this for Donald V. Fites: He's not afraid of a fight. The Caterpillar Inc. chairman took on all 840,000 members of the United Auto Workers when he pledged to replace 13,000 strikers if they didn't return to work on Apr. 6.

It's a huge gamble for both sides. For the UAW, what started as a minor walk-out has ballooned into a major confrontation. The outcome could affect hundreds of thousands of workers at Big Three carmakers. The stakes are rising for the rest of organized labor, too. The walkout marks the first time that the UAW, one of the nation's strongest unions, has faced a major threat of permanent replacements. If it loses, the blow could set off another downward spiral in labor's clout.

UP THE ANTE. Meantime, Fites has placed a bet that union members will buckle under the pressure. If they don't, it could be midsummer before Cat gets its factories fully functioning. And while the company won't go broke as it trains new workers, rivals such as Japan's Komatsu Ltd. could grab market share. And even if Fites wins, he'll have an angry and alienated work force on his hands. He has set back years of effort that his predecessors invested in building labor-management cooperation. "You can't build quality with replace-

ment workers," insists UAW Secretary-Treasurer Bill Casstevens.

Few observers thought the five-month-old strike would escalate so far. The UAW expected Cat to follow the lines of a contract it negotiated last year with Deere & Co. But Fites insisted he needed concessions to compete with Komatsu, his primary rival overseas. When the UAW didn't budge, he upped the ante in hopes of getting workers to break ranks with the leadership.

In the first few days after Fites's deadline, that wasn't happening. By Apr. 8, the company said that just 400 strikers had crossed the line. The UAW pegged the number at fewer than 200. Union leaders are betting that Fites will back down by the end of April if they can hold out. But workers walking the line have expressed fear about losing their jobs. "I don't know what'll happen" when Cat starts hiring replacements, one striker frets.

Cat workers have plenty of reason to knuckle under. True, their union just gave them \$2,000 apiece in strike benefits to help offset lost wages. But Cat officials argue that

workers won't risk jobs that will be paying \$47,000 a year on average by 1992. What's more, the typical Cat employee is 47 years old and has 28 years of service. In just two years, more than 60% of them will be eligible for retirement—ad fat pensions. "They're not going to get that up for a national labor movement," says Caterpillar Group Vice-President Glen A. Barton.

COLD COMFORT. But what if they hang tough? Cat's \$1.5 billion line of credit gives it financial staying power. But the company has just started advertising for new hires. Usually, companies preparing to hire permanent replacements start taking applications well before any strike. And Wayne Zimmerman, Cat's vice-president for human services, acknowledges that Cat didn't actually perform studies to determine whether it could find the thousands of skilled workers it needs to run high-tech factories.

Even if it can find candidates, Zimmerman says the company won't start hiring until May 1. He estimates it can interview no more than several hundred applicants a week. So it would take months to staff Cat's factories. It would then need up to two months more to train new workers, he says.

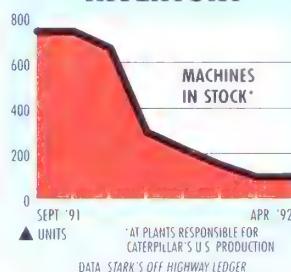
Output could suffer, too. For nearly 5,000 managers and office workers are manning Cat's factories—enough, officials insist, to meet demand. But industry consultant John Stark reckons the company will produce only 20 machines in April, down from 700 a month last year. Indeed, one plant official reports that managers are "having a tough time trying to figure out" how to operate the plants.

Low output could really hurt if the construction-equipment market picks up in May, as many think it will. Cat's factory inventories already are nearly depleted (chart). And dealers say they have only one or two months of stock left. Meanwhile, Komatsu and J.I. Case are boosting production of some construction equipment. "We'll be concerned about losing market share if the strike continues through May," says a Caterpillar dealer in the Southwest.

That's not much comfort to the picketers in Aurora, Ill. Strikers there aren't confident they can beat Fites if the company starts buying in replacements. "I'll stay out as long as my wife lets me," quips one worker. Cat is hoping that won't be long.

By Kevin Kelly in Aurora, Ill.

CAT'S SHRINKING INVENTORY



THE KEYS TO ENERGY SECURITY: MORE DRILLING, LESS SWILLING

In the Senate, the legislation is formally known as the National Energy Security Act. But it hardly lives up to its lofty title. Little more than a year after the U.S. went to war to protect its oil lifeline in the Persian Gulf, Congress is crafting an energy bill that does little to protect America's energy security.

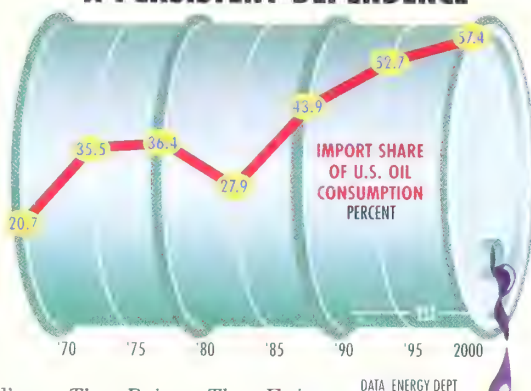
In the House and Senate versions, there are laudable provisions. For instance, the proposals encourage investments in energy efficiency for appliances, streamline licensing for new oil-gas pipelines, boost incentives for the use of alternative fuels, and spur more competition among utilities.

But this grab bag of measures doesn't address America's most serious energy problem: a voracious appetite for foreign petroleum. The U.S. now imports about 45% of its oil (part), and the Energy Dept. estimates that with no change in consumption and production patterns, the figure will leap to 65% by 2010. Most of those imports will come from the Persian Gulf, home to two-thirds of the world's oil reserves. "We're making ourselves vulnerable to a cutoff and increasing our dependence on a highly unstable part of the world," warns James J. DiBona, president of the American Petroleum Institute.

IS IT DANGEROUS? Before another bill hits, policymakers should move to the front: reviving domestic production, now at a 40-year low, and cutting oil use. The Senate tried to address these issues in an earlier bill that would have opened Alaska's Arctic National Wildlife Refuge for oil exploration. Another provision would cut consumption by raising mileage requirements for cars. That's especially important since transportation accounts for two-thirds of U.S. usage. Both proposals died fiery political deaths. Environmentalists argued that drilling would spoil the pristine Refuge. And the auto industry fought hard against raising the average-mileage requirement to about 40 mpg from the current 27½ mpg. Defeat of the measure would compromise safety by forcing it to build smaller, more dangerous cars—an argument undermined by an Apr. 9 report of the National Research Council (NRC), a federal research agency.

Any proposal to curb demand could be politically treacherous. Yet there's no way around the need to restrict U.S. profligacy. It's no surprise that Americans are freewheeling guzzlers, since gasoline prices, at about \$1.03 a gallon, are at their lowest level—adjusted for inflation—since World War II. Gas in the U.S. "is one of the great bargains in the Western world," says Daniel H. Yergin, president of Cambridge Energy Associates and author of the 1992 Pulitzer Prize-winning book

A PERSISTENT DEPENDENCE



The Prize: The Epic Quest for Oil, Money, and Power.

Yergin favors a modest rise in taxes to encourage conservation. Admittedly, such a move would put a strain on the economy. But when the nation's welfare is viewed broadly, sticking with the status quo is hardly a formula for economic growth and national security. Last year, the U.S. ran up a merchandise trade deficit of \$66 billion—\$44 billion of it in oil.

Washington could also consider a stiffer tax on gas-guzzling cars—or a tax credit for buyers of fuel-efficient vehicles. The current tax applies only to cars that get less than 22½ miles per gallon, and that group includes just



a single U.S. model. Such measures could make the country's auto fleet greener by giving consumers an incentive to change their buying habits, rather than by imposing new regulations on carmakers.

Another good idea: the White House plan to provide pollution-emission credits to companies that buy aging clunkers—which are both gas hogs and polluters. Critics say the plan would leave the poor with fewer cars they can afford. But Unocal Corp., which briefly instituted a similar program in 1990, reports that those driving the clunkers aren't necessarily indigent. It found that drivers who took Unocal's offer to pay \$700 for old models were representative of Los Angeles area residents.

IMPORT FEE. Policymakers also ought to reconsider strengthening fuel-economy standards. The NRC report, while recognizing the potential costs to manufacturers and consumers, concludes that higher economy levels are feasible. And the danger of a resulting increase in highway deaths may not be as

great as opponents contend. The panel suggests that the impact on safety "may be small," partly because better design and safety technology could offset the risks posed by a required reduction in automobile weight. The NRC also recommends higher gas taxes and rebates for fuel-efficient cars.

A conservation program is only half the battle. The U.S. must also boost domestic supplies. The President's proposed tax breaks for the oil and gas industries might not be enough to get rigs out of mothballs. Charging a fee on imported oil to keep prices above \$20 a barrel may be what's needed. That would cheer oil workers: Since 1985, the oil industry has lost 212,000 jobs, compared with the auto industry's loss of 57,000.

Last July, President Bush told the nation its "energy future should never be at the mercy of foreign exporters." Wise words. Now, Congress and the White House have to muster the political nerve to act as wisely as they speak.

Washington should consider upping the fuel-economy standard to, say, 40 mpg from the current 27½ mpg



TEACHER SNEED AND STUDENTS: LEARNING THE BASICS BY TACKLING REAL-LIFE PROBLEMS

'THIS IS THE MISSING LINK BETWEEN BUSINESS AND SCHOOLS'

A Labor Dept. commission provides a vision for education reform

There has never been a shortage of ideas about how to fix the ailing U. S. school system. But on Apr. 7, a commission headed by former Labor Secretary William E. Brock issued the most comprehensive—and radical—set of suggestions so far.

Many of the ideas, which were developed by education experts, teachers, executives, and labor officials, aren't new. But the Secretary of Labor's Commission on Achieving Necessary Skills (SCANS) fills a crucial gap by providing an overarching vision of how to tackle educational reform.

The proposals also apply to corporate and government training programs—which could help put momentum behind the reforms. Already, SCANS's ideas are being studied by government agencies, school systems, and companies. "I got a copy of the first SCANS report in the mail and said, 'This is the missing link between business and schools,'" says Mark Pritchett, a vice-president of the Florida Chamber of Commerce.

The group's most dramatic proposal is that schools fundamentally change their teaching philosophy. Today, teachers often teach by lecturing to students who sit passively in

class. Starting with words and numbers, they gradually gain the ability to turn words into phrases, sentences, and paragraphs, and numbers into sums and models.

SCANS argues that this doesn't teach critical thinking. It advocates "applied learning," in which students learn basic skills such as math and science by using them to solve everyday problems (table). Instead of sitting quietly by themselves, they study in groups, the way people often do at work. And rather than memorizing, they're taught to deal with questions that often have no clear answer. "Parents teach their kids reading in context, but schools don't, which may explain why parental help is so important in education," says Thomas G. Stiche, a learning expert and SCANS member.

HANDS-ON. SCANS's approach was developed after extensive research within the U. S. business community. The initial research focused on devising a list of basic skills necessary to do most jobs today. The list includes using resources such as time and money, working in groups, evaluating information, understanding social and technical systems, and using technology. "SCANS could have a very important impact, depending on how well it's implemented around the country," says American Federation of Teachers President Albert Shanker.

Already, several school districts are using such ideas. Fort Worth, which had been studying applied learning even before SCANS issued a preliminary report last June, asked 20 of its teachers to teach courses using such methods. They met for a month last June to study the emerging theory on the subject, including the first SCANS report.

Kathy K. Sneed, who has been teaching in Fort Worth high schools for 10 years, was one volunteer. Last fall, she began teaching her humanities course at R. L. Paschal High School using applied learning techniques. Working within the established curriculum, she asked her students to decide on a project. They

A CURRICULUM FOR THE '90s: LEARNING IN CONTEXT

ENGLISH
SKILL: Using resources
ASSIGNMENT: Write a proposal for an after-school career lecture series. Include a list of speakers, a list of people needed to coordinate the project, and a cost estimate

SKILL: Interpersonal
ASSIGNMENT: Debate before a panel of peers whether the U.S. should withdraw military support for Japan

SCIENCE
SKILL: Systems
ASSIGNMENT: Build a model of human population growth that determines how much food is available for each person and birth and death rates

MATH
SKILL: Technology
ASSIGNMENT: Read manuals for several software programs and write a memo recommending one program to handle math problems

to examine the city's architecture. Students broke into groups, each chose a different method to what it had learned. One group video, another still photography, others used drawings and models. Finished work was displayed at the school-district fair. "I gave them a paper test to see what they learned," says Sneed. "But I also

used the SCANS skills to see if they budgeted time wisely, worked well in groups, and so on."

Other groups are adopting the ideas, too. Schools in Tampa and Louisville are testing SCANS's proposals, and a Florida reform commission is incorporating SCANS skills into new state educational standards. The Labor Dept. wants its training programs to teach the SCANS

skills. And four companies whose executives helped develop SCANS—Motorola, TGI Friday's, MCI, and Gannett—are examining ways to use the ideas in their hiring and job-performance criteria.

SCANS surely is no panacea. But by building corporate support, the commission may finally begin to force real change upon public schools.

By Aaron Bernstein in New York

TING

WAYNE AND GARTH WON'T MAKE TIME. NOT!

Boys are cashing in before they go the way of the hula hoop

o way!" A movie based on a *Saturday Night Live* television skit about two goofy teenage boys who revere aging rock stars and host a public-access talk show from their urban basement?

Yes!" Paramount Pictures Corp. paid the flick for a modest \$15 million. "It's a winner!" Derided for its sophomoric humor, *Wayne's World* is deemed "worthy" by critics.

Why? The movie is a huge hit. "Wayne!" everyone is wearing *Wayne's World* T-shirts and baseball caps and shouting in Waynespeak.

"It's excellent!" Paramount, Broadway Video Entertainment, SNL's production company, and LucasArts Licensing are expected to rake in righteous bucks. The 6% to 10% of merchandise sales are paid by licensees. By the first week in April, *Wayne's World* pulls in \$1 million in ticket sales and will become a \$100 million blockbuster. Wayne would say: "Good work, my

dolls, candy, gum, bookbinders, and notebooks.

SNL producer Lorne Michaels, who for years limited SNL licenses to a handful of books and videos, has been busy signing licensing deals for other SNL properties. A book on Pat, the hermaphrodite played by SNL actress Julia Sweeney, is due out in September, as are scores of trading cards, plastic figures, and T-shirts depicting old and new characters from *Saturday Night Live*.

Meanwhile, *Wayne's World* paraphernalia continue to blow out of stores. A how-to book, entitled *Wayne's World: Extreme Close-Up*, provides tips on mimicking Wayne's mannerisms and phraseology. The book sold 275,000 copies, is in its third printing, and spent three weeks on *The New York Times* best-seller list. The *Wayne's World* sound track, complete with such golden oldies as Queen's 1975 hit *Bohemian Rhapsody*, was the No. 1 album two weeks in a row on the *Billboard* 200

chart and will go platinum, with more than 1 million CDs and tapes sold. "At this rate, we're going to reach 2 million," says Bob Merlis, publicity director at Warner Bros. Records Inc.

Who's buying all this stuff? Teenage boys, mainly. Paramount claims that an estimated 25% of boys 12 to 17 years old has seen *Wayne's World* at least four times. "I liked their attitude," says Mark Hersherberg, 16, and a junior at West High School in Torrance, Calif. "They didn't care about anything relevant to the real world. They're beyond anything reasonable."

WHIMS. But teenagers are a fickle lot, and what's cool today could be totally "unworthy" tomorrow. "I thought it was a hilarious movie," says another Torrance high schooler, 15-year-old Jane Liaw. Yet Liaw won't buy any merchandise. "It's too faddish. People will think a movie's cool and wear a shirt for one or two months. Then it gets old." At J.C. Penney, *Wayne's World* T-shirts are already losing out to T-shirts depicting *Ren & Stimpy*, cartoon characters that have become especially popular with college students. "*Ren & Stimpy* have taken off like crazy," says Carol Meek, an assistant buyer at J.C. Penney Co., who says she has sold 20,000 T-shirts in the last five weeks, vs. 6,000 *Wayne's World* shirts. "And in another 30 days, we expect *Batman* to pick up."

Indeed, *Batman Returns* could become *Wayne's World's* top rival. Megamarketer Warner Bros. Inc. plans to back its June launch of *Batman II* with lots of merchandise. In 1989, the first *Batman* took in over \$500 million for licensed products.

But images of Wayne and Garth will blitz the U.S. for months. And if a planned sequel comes out next summer, sales could surge all over again. Meantime, "Party on, Wayne! Party on, Garth!"

By Laura Zinn, with Lori Bongiorno, in New York and Gloria Lau in Los Angeles

er mind that neither of the stars of *Wayne's World* is conventionally attractive. At the movie's release, they aren't particularly handsome. The arrested adolescent humor of *Wayne's World* has struck a chord with teenagers and young consumers and adults. The images of Wayne (Mike Myers) and Garth (Dana Carvey) are now splashed across thousands of T-shirts, posters, and key chains. Meantime, the two will be featured on such towels, trading cards, video and games, talking



EXCELLENT MERCHANDISE: WAYNE'S WORLD TIE-INS ARE FLYING OFF THE SHELVES

EDITED BY HARRIS COLLINGWOOD

ATTENTION, SHOPPERS

Do you know where you spend your time when you go to the grocery store? To find out, the folks at VideOcart, a Chicago outfit, mounted sensors on shopping carts and tracked customers through the aisles. They found out how often shoppers stop in various departments and the average time they spent there. Here's a sampler:

aisle or department	percent who stopped	time spent in seconds
BABY FOOD	8.7	130.9
BREAD	5.6	42.3
LIQUOR	9.2	136.6
MEAT	87.8	154.0
PRODUCE	91.2	181.0
SEAFOOD	18.0	105.5

DATA VIDEOCART INC.

GLOBEX MAY HAVE TO TRADE AROUND JAPAN

► More than three years behind schedule and at a hefty \$70 million cost, the Globex electronic trading system finally has a launch date: June 25. But Globex, owned by the Chicago Mercantile Exchange, the Chicago Board of Trade, and Reuters Holdings, already trails foreign exchanges and off-exchange systems in the race to dominate worldwide futures and options trading.

Globex' next big test is more political than technological. Its trading terminals are already set up in Paris, London, New York, and Chicago. But Japanese regulators refuse to allow a Globex debut. Unless Tokyo participates, Globex won't be able to fulfill the worldwide ambitions that its name suggests.

SPANISH NETWORKS ARE DIAL-JUMPING

► Spanish-speaking TV viewers will soon see some big changes on the tube, thanks to two deals involving major

Spanish-language networks. Mexican broadcaster Grupo Televisa plans to fold its U.S. network into Univision, 'a Spanish-language network owned by Hallmark Cards. The merger comes as part of an Apr. 8 deal in which Grupo Televisa and other investors agreed to buy Univision Holdings Inc. from Hallmark for \$550 million.

Rival Telemundo Group will give the new network stiff competition: It just obtained the rights to air seven MCA feature films, including Steve Martin's *The Jerk* and *Smoky and the Bandit*, starring Burt Reynolds.

BOB BRENNAN LOOKS FOR ANOTHER GAME

► Robert Brennan may have broken off his short-lived dalliance with casino operator Bally Mfg., but he seems hungrier than ever to get into the gaming business. The former penny-stock mogul bought 7.5% of Bally in mid-March and announced he would seek a casino owner's license. Less than a week later, he started dumping his shares after exchanging nasty letters with Bally executives, who refused to meet with him. Brennan probably netted meager gains on the stock, which has been trending down, but he figures he picked up about \$1.2 million on Bally bonds, which

GIVING NEW MEANING TO THE SCALES OF JUSTICE

Lawyers and snakes, perfect together. And before you lawyers out there threaten to sue over yet another journalistic cheap shot, consider this: It's a law firm that started the Adopt-a-Snake program to raise money for the herpetology department at the Dallas Zoo.

"We feel an affinity for the snakes because they, like lawyers, are often misunderstood,"

says William Candee, senior associate for Bickel & Brewer Dallas. While some might dispute that statement, it is true: The good barristers have been raising funds for the zoo for years now, adopting the entire snake collection, then auctioning individual members of the menagerie to the public—leave their new charges at the zoo. Adoptive "parents" even name their reptile after their favorite lawyer. This year the firm is teaching schoolchildren about the place of snakes in the food chain. A few rungs above the lawyers, no doubt.



have run up about 50% since January.

Now, Brennan is looking at more gaming plays in Atlantic City, Nevada, and on Indian reservations. Says Brennan: "It's a good buyer's market." But wherever he goes, he'll face regulatory scrutiny over still-unresolved allegations of fraud at his First Jersey Securities brokerage house.

NOVELL: IN NO RUSH TO HIRE

► Ray Noorda just doesn't see what all the fuss is about. Yes, says the 68-year-old CEO

of software giant Novell, he has no designated successor, but "my doctor says everything's fine." He says it's up to the board of directors to pick a successor, and if they have found a future CEO, "they haven't told me."

The question arose because Novell announced on April 1 that two men, James Bills and Richard Williams, who have been considered candidates for the top spot, had resigned. Bills, formerly the head of Novell's market-leading networking software operation, took a leave of absence in January to spend more time with his family and since decided not to return. Noorda says he hopes Bills will change his mind. He is less sure about Williams, who had headed the group that designs operating systems for personal computers. Asked if Williams left because he wasn't designated heir apparent, Noorda says, "That was not expressed to me as the reason."

Noorda shrugs off the concerns of analysts who worry that Novell could be left leaderless. Noorda says a restructuring last year means the company could carry on indefinitely without him. Each decision, he says, is under a strong leader.



"Political campaigns seem so simplistic and superficial... In the 20 seconds we have left, could you tell us why?..."

IN THE TWO BILL CLINTONS MAKE UP A WINNING TEAM?

There comes a time in many relationships when couples sit down and decide whether to tie the knot. For Bill Clinton and the Democratic Party, that time has come. Trouble Arkansas governor is wooing his reluctant party with that no romantic likes to hear: "I may not be perfect, but I have all you've got." So between now and the July convention, expect to see yet another stage in the evolution of Bill Clinton, Presidential candidate.

So far, Democrats aren't head over heels in love. Their

standard-bearer has come in the primaries so battered by charges of draft-dodging, questionable marital fidelity that even voters despair of his ability to beat George Bush. Still, Clinton's sweep of the primaries in Kansas, Minnesota, New York, and Wisconsin leaves him with most two-thirds of the delegates needed for nomination. Clinton strategists calculate that their man can lock up nomination just by finishing second in most of the remaining primaries.

TASK. Protest votes for former California Governor Jerry Brown—and votes for former Massachusetts Senator Paul Tsongas—will still be an irritant, but it's time for Clinton to face a major task: repairing the damage done by his fight with Bush.

In the nomination, Clinton played down his chairmanship of the conservative Democratic Leadership Council and its interest groups that dominate primary voting. Now, he has to combine the two personas into one that can win in November. Says Representative Charles E. Schumer (D-N.Y.): "Clinton can get Southern votes without losing the traditional Democratic coalitions of labor and blacks."

Clinton will also extend his hand to the alienated Democrats who have backed the campaigns of Brown and Tsongas. Clinton will

try to depict himself as the candidate who can bridge racial and class fissures. That's why he went to Peoria, Ill., on Apr. 8 to meet with both sides in a bitter strike at Caterpillar Inc. "We want voters to see a candidate who can handle crisis, lead warring factions, and win in November," says George Stephanopoulos, Clinton's deputy campaign manager.

As the campaign moves to more hospitable territory in Virginia on Apr. 11 and Pennsylvania on Apr. 28, the Arkansasian will return to centrist themes. He'll talk about the need to

make government efficient, to provide welfare recipients incentives to find jobs, and to make schools more accountable. He also must retool his economic message to focus on the quality of the recovery, especially the lack of high-skill, high-wage jobs. Clinton strategists plan a series of speeches in which he will detail his agenda for the nation.

'BAD SIGN.' The danger is that Clinton's passion for wooing voters with policy plans could change him from the least-trusted man in politics to the most boring. "Laundry lists won't cut it," notes Washington-based political scientist William Galston, who says Clinton hasn't revealed his top priorities. "If by September, people don't know the three big things he would do as President, that's a bad sign."

Given all the healing Clinton must do, there's no guarantee that the Democrats' nominee-presumptive will get himself into competitive trim by the July convention. And given the party's penchant for squabbling—not to mention Brown's potential to create mischief—Clinton and the Democrats don't seem headed for domestic bliss. "Slick Willie" doesn't strike many Democrats as Mr. Right. But he's the only real suitor left. And in a contest with George Bush, he'll have to do.

By Douglas Harbrecht and Paula Dwyer



CLINTON: BRIDGING WARRING FACTIONS

SENATE WRAPUP

SENATE

Republican hopes for eking out a narrow win in this fall's Senate elections, getting a boost from some surprise Democratic retirements. On Apr. 7, Idaho's Tim Wirth became the seventh of 34 senators up for reelection near to announce that he won't seek re-election. The freshman Wirth faced a tough race against Republican State Senator Terry Considine. Just a few days earlier, Democrat Kent Conrad of North Dakota's politics into turmoil by announcing that he wouldn't seek a second term. Conrad's reelection had been regarded as virtually certain, and his decision to quit gives the GOP a

decent shot at the seat. The third recent retirement, that of New Hampshire's Warren B. Rudman, is likely to have no impact on the partisan balance because GOP Governor Judd Gregg is heavily favored to win and keep the seat in the GOP column.

But the Republicans, who currently hold only 43 Senate seats, still have major vulnerabilities. Bob Packwood continues to struggle in Oregon. And in Wisconsin, half the voters polled by the *Milwaukee Journal* believe two-term Republican Bobasten has done a less-than-good job. He leads Democratic Representative Jim Moody only 46% to 34%, a very weak showing for an incumbent.

HEALTH CARE

The public may not know exactly what kind of health care system it wants, but voters definitely think government should fix the mess. That's the message of a Kaiser Family Foundation/Commonwealth Fund survey in which 60% said government should play a primary role in offering insurance and controlling costs. Just over 30% said government was mainly to blame for health care woes, with doctors finishing second at 25%. But voters split nearly evenly among the three major reform approaches—"play or pay," a Canadian-style national system, or tax credits to buy private insurance.

CUBA



WHO'S DOING BUSINESS IN CUBA

Company	Type of business
CARGILL U.S.	Selling farm products from foreign units
GRUPO SOL, GRUESVA & IBERCUSA SPAIN	Hotel joint venture
ITALCABLE ITALY	Joint venture to rebuild overseas phone system
LTI INTERNATIONAL GERMANY	Managing a major hotel
OTIS ELEVATOR U.S.	Mexican subsidiary selling elevators
PETROBRAS BRAZIL	Negotiating to search for oil
TOTAL FRANCE	Exploring for oil

DATA: ENI

MR. CASTRO GOES TO MARKET

Suddenly, Western investment is replacing Soviet aid

What's this? Luxury hotels along Cuba's white sands? It's true. Once frowned on by the *revolucion*, a half-dozen fancy hotels have opened on Varadero Beach in the past year, and more are going up, complete with four-star restaurants and even a golf course, long forbidden as a capitalist pastime. Offshore, an oil-search vessel has been shooting seismic profiles of the seabed. And in Havana, plans are under way for hooking Cuba's telephone system into the modern world.

Deprived of his former Soviet subsidies, Fidel Castro is turning to European and Latin business to help rescue Cuba's reeling economy, in which gross national product fell by more than 20% in 1991. Facing shortages of everything from gasoline to meat, planners are scrambling for deals that will earn hard currency. The new hotels built by joint ventures with Spanish companies will bring in well-heeled foreign tourists, expected to top 500,000 this year. Oil exploration by France's Total could yield a windfall, and Italy's state-owned Italcable has signed a \$65 million joint venture to rewire the island for overseas calls.

Foreign money and knowhow are giving Cuba a badly needed lift. And they could entrench Europeans in Cuba just when U.S. law bars U.S. companies from competing there. Last year alone, Europeans and others plowed \$500 million in investment into Cuba. "Because of the U.S. trade boycott, [the Cubans] are banking on Western Europe especially," says a senior executive at LTI International & Hotel, a subsidiary of German tour operator LTU. It has an agreement to lease, manage, and market Varadero's Hotel Tuxpan.

Foreign executives are doing business in Cuba not just because they're betting on Castro's demise. In fact, the *jefe supremo's* political grip is so tight that

Smith College economist Andrew Zimbalist, like many experts on Cuba, doubts that he will fall any time soon. The Cuban economy "has taken the main hit," he says. "It is down 35% from where it was two years ago, and maybe it will go down another 10% this year." Then, he adds, "a number of things will turn around."

WAITING GAME. Of course, European investors are taking risks. There's no guarantee a future government won't crack down on established foreign investors. And Washington is trying to shoos foreigners away by warning it will push claims by Americans for expropriated property in Cuba—currently valued at \$5.4 billion. "It's an economic gamble by those waiting and those going," says James D. Whisenand, a Miami lawyer

who organizes conferences on Cuba.

Washington is also toughening its cuts on U.S. technology exports to Cuba. In example, Washington barred Germans Siemens from selling a medical diagnostic machine run by a U.S.-made microcomputer. And Representative Robert Torricelli (D-N.J.), chairman of the House Western Hemisphere subcommittee, began hearings in early April on his bill aimed at toppling Castro by tightening the U.S.



KEEPING A TIGHT POLITICAL GRIP

e. It would arm-twist allies to seve-
le and investment links with Cas-
at such a strategy could also eme-
U.S. in bitter fights with major
uch as Canada and the European
unity, which are more inclined to
e island through trade.

Washington isn't interfering with
s of a wide range of products to
by foreign subsidiaries of U.S.
nies. Such sales, from Cargill Inc.,
levator Co., auto-parts makers,
hers, soared to \$533 million in
s former Soviet bloc supplies to
dwindled. The Bush Administra-
still granting licenses for foreign
aries' exports of manufactured
s with modest amounts of U.S.
ogy, such as equipment sold by
levator's Mexican subsidiary for a
avana hotel.

from America's arm's-length ap-
Europeans roll up their sleeves
de Cubans, helping with manage-
and technology. Spain's Miesa, a
engineering firm, has a 49% share
astec, a government-owned ener-
ervation company. One goal: to
oil consumption at the Che Gue-
nickel Works at Moa Bay. There's
market for such services in the
energy-starved economy.

NG. Oil exploration may take a
o pay off. Under Total's six-year
tion contract, any oil found will
veloped under a 25-year production
ship with the Cuban government.
ther oil companies are joining the

Sweden's Taurus Petroleum re-
signed an exploration deal. Bra-
ate-run Petrobrás is negotiating
es to explore for oil and modern-
Soviet-built Cienfuegos refinery.

g business won't be a picnic.
s are still squabbling about how
open up the island to capitalism.
uban managers are often ignorant
tern business practices. Italcable
its preliminary agreement in late
ut is still waiting for a firm con-
an Italcable spokesman complains
bans are "stalling."

able's frustration is equaled by
f American Telephone & Tele-
Co. It got the nod from Washing-
upgrade the cable link between
and Cuba. Only 500,000 of 60
attempted calls go through each
ut so far, Castro refuses to allow
odernization. He suspects that
ngton wants expanded phone con-
help destabilize Cuba. What's
he insists on collecting Cuba's
of telephone fees, which the U.S.
ry has held since 1963. But Castro
ave to back off this fight and oth-
e it if he wants investors to keep

ohn Pearson in New York and Gail
ge in Miami, with bureau reports

RUSSIA

THE GREAT RUSSIAN DEPRESSION OF 1992?

An industrial crisis could soon bring unemployment, hunger—even riots

Machinist Vasily Gusov's temper is as hot as the fiery steel-casting oven in Shop No. 36 at Uralmash Zavod, a giant heavy-machinery producer in Yekaterinburg in the Ural Mountains. Standing near the oven's controls, Gusov whips out his wallet to display the 13 rubles (13¢) left over from his 3,000-ruble monthly salary. "This is all the money I have. I can't even eat lunch," he snaps. "The factory didn't pay us on time. And we are all as angry as dogs."

Gusov is just one of millions of workers in the former Soviet Union facing a harsh new era. For decades, huge production plants such as Uralmash provided workers with cradle-to-grave social services. But now that the former Soviet economy and political system have collapsed, Uralmash is almost bankrupt. For the first time, workers such as Gusov are facing unemployment and poverty.

Uralmash was the pride and joy of Joseph Stalin, who finished building it in 1933 in the hilly seclusion of the Urals. During World War II, it churned out the T-34 tanks that beat Hitler's army. Now, Uralmash is paying a terrible price. Since January, output has fallen 15% and will likely plunge 25% by yearend. As many as 8,000 of its 39,000 workers could lose their jobs in coming months.

The scenario is the same throughout Russia's industrial heartland (charts, page 50). Over the next several months, rust-belt cities such as Perm, Chelyabinsk, and Nizhniy Tagil are headed for mounting unemployment and pain as Russia's manufacturing sector drastically retrenches. Industrial output could drop from 25% to 50%, and unemploy-

ment could rise to 11 million, the International Labor Organization estimates.

This prospect of industrial collapse is the biggest economic problem facing Russian President Boris Yeltsin, who initiated tough reforms on Jan. 2. It is now the major issue dominating a fiery session of the Congress of Russian People's Deputies that started in Moscow on Apr. 6. Deputies from industrial ar-

reas are arguing fiercely to delay moves to a market economy while having the Russian government bail out old-style state enterprises. Yeltsin and his youthful team of reformers may have to give some ground, but if they surrender too much, they'll hurt prospects for the \$24 billion in aid pledged by Western nations. Yet if the reformers hold fast, they risk riots or even another coup attempt.

The optimists hope the ultimate result will be a more successful, market-oriented economy. But getting there, if possible at all, will be excruciating. The U. N. Economic Commission for Europe warns that Russia's industrial depression could prove even more devastating than America's Great Depression of the

1930s. There are few safety nets in place to catch those displaced by massive unemployment. The newly laid-off will be hard-pressed to handle soaring food prices or move elsewhere because of a nationwide housing shortage.

TOPSY-TURVY. These shock waves already are ripping through Uralmash, one of Russia's biggest heavy-machine-making complexes, producing oil rigs, presses, and other items. Over in workshop No. 22, workers can't believe the fast transition. Only two years ago,



Uralmash, once
Stalin's pride and
joy, is on the brink
of bankruptcy

MESSAGING:

The Global Payoff

"Time zones, geography, language, and even cultural habits have to be transcended if a business is to survive."

Arno Penzias, AT&T Bell Laboratories

JUST-IN-TIME INFORMATION

If the 1980s introduced us to just-in-time manufacturing as a strategic business weapon, then the 1990s will show the greater value of just-in-time information. Access to all forms of information — voice, text, data, image, etc. — has become increasingly vital to business survival. This is especially true in today's high-speed environment, where transactions occur in seconds and key decisions in minutes. Modern businesses can compete successfully only with the ability to communicate anytime, anywhere . . . on the planet.

In this decade of flattened and more decentralized organizations, electronic messaging offers powerful information management tools to its users. Whether it is a designer needing approval on drawings, research engineers exchanging ideas, a marketing manager requesting bids from suppliers, or a CEO setting new policy, there's a messaging technology available that delivers the information when, where, and how it is needed. Messaging cuts across all organizational levels, shortening the line of command as well as the psychological distance between top management and staff. As a result, the

increased responsiveness to the issue at hand contributes directly to the sharpening of a business's global competitive edge.

THE GLOBAL WORKPLACE: SOME EXAMPLES

Many businesses are finding that the savings in time and labor are well worth the investment in electronic messaging; others are finding that freedom from geographic and time constraints is crucial for competing in global markets. As the economies and efficiencies of electronic messaging become more wide-

ly appreciated, geographically dispersed businesses will become easier to operate and manage. Today's progressive companies use electronic messaging to keep in touch with employees, customers, and vendors, overcoming the barriers of time and distance, and enhancing business relationships. For example, in the petrochemical and transportation industries, many companies have already found that using messaging to augment and complement voice conversations not only improves partner relationships but reduces time and cost of making decisions.

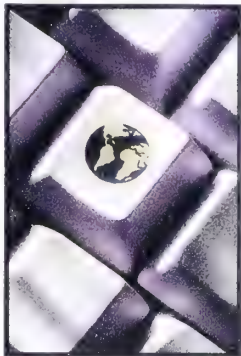
Petrochemical companies rely on electronic messaging because of the inherent interdependency of their business — one company alone has 28,000 corporate users that communicate with 12 million electronic mailboxes, worldwide. For this company, there was never any question about extending its successful corporate messaging system to the outside — the problem was how to implement it to better serve customers and suppliers. Proprietary solutions were quickly discarded as it became apparent that only an international public messaging network could keep pace with technology advancement. The solution was to connect the internal system to a public messaging network which consolidated and managed faxes and existing E-mail, ensuring that both internal and external communications were simpler, more effective, and future-proof.

Another major petroleum company uses electronic messaging to help it adjust to worldwide events. As their director of telecommunications says, "We were doing our faxes and E-mail piecemeal, and a public messaging network was the only viable way to coordinate our com-



cations. An unexpected result is the improvement of relationships with global suppliers while the cost of doing business with them actually decreased. For example, moving the branch in New York from being on-line 24 hours a day to being on-line 9 a.m. to 5 p.m. — a 17-hour time difference — resulted in significant savings in overhead and wear-and-tear on people."

The transportation industry reaped similar benefits. DHL Worldwide Express, the leader in air courier express services, places as much emphasis on information about the packages people ship as the packages themselves. DHL's ability for customers to inquire about shipment status, and, con-



versely, for DHL to proactively notify them about package delivery are critical components of DHL's customer service. DHL recognizes that using electronic messages permits customers and suppliers to interact in a way that is simple and effective. DHL's blend of voice mail, electronic mail, and enhanced facsimile service allows both people and computers to respond to business needs

on either a customized, time-of-day, or seasonal basis. As John Payne, DHL's communications architect, states, "Electronic messaging is a must for a global business to keep competitive and provide total quality of process for customers. And the use of a public messaging service

permits networking dollars to be spent more wisely, since DHL only pays for messages that are sent."

Payne cites other reasons for electronic messaging, such as:

- improving the quality of information
- speeding decisions
- reducing paper handling and cost
- lowering operating expenses
- introducing new, cost-saving applications
- internationalizing services

Aside from their commitment to globalization and their investment in messaging, these companies have something else in common: their choice of AT&T EasyLink Services as their messaging provider.

AT&T EASYLINK SERVICES

AT&T EasyLink Services' customers recognize that just-in-time information is a major contributor to the successful globalization of their business. A failure to deploy electronic messaging's benefits could ultimately result in a failure to survive in global competition. AT&T EasyLink Services already provides electronic messaging to and from 160+ countries, with sales and support people in more than two dozen of them. From mobile as well as fixed locations, AT&T EasyLink Services offers electronic mail services, enhanced facsimile, electronic data exchange, and telex as well as a large selection of on-line information services from more worldwide locations than any other provider. Information empowers. And these services can connect people to information anytime, anywhere — around the block or around the world.



EasyLink Services

WHAT IS ELECTRONIC MESSAGING?

Electronic messaging is a natural extension of available computer and communication technology.

The rise of distributed computing and local area networks in the latter part of the 1980s allowed businesses to employ a broad range of incompatible hardware, improving overall efficiency, but making communications more difficult. Electronic mail, initially embedded in some office automation packages designed for internal one-to-one communications, has become a powerful external communications tool as well: you, your customers, suppliers, and business partners can share and manage information, whatever its form.

The various components of electronic messaging — E-mail, facsimile, electronic data exchange (EDI), and telex — provide the flexibility needed for conducting truly global business.

E-mail transports messages electronically around the globe . . . fast.

An important sales update can be simultaneously broadcast to multiple, dispersed locations.

Enhanced Facsimile Services provide an effective set of alternatives for conventional fax. These services support the transmission of text and pictures to any number of locations. Timesaving features include multiple redialing and simultaneous broadcast of information to locations predefined in a stored address list.

EDI (Electronic Data Interchange) allows the paperless interchange of business documents such as invoices, purchase orders, and price lists — even if the forms of the sender differ considerably from those of the recipient.

A truly integrated public messaging network includes telex, which will remain a primary means of business communication in some regions for years to come.



PRODUCTION IS OFF 15% SINCE JANUARY AT URALMASH, AND UP TO 8,000 FACE LAYOFFS

3,800 workers on three shifts churned out cannons for modern T-72 tanks. Now, orders have plunged to almost nil, and two-thirds of the work force has left or been sent to other parts of the enterprise. "We never expected that things could change so fast," says Valery N. Vasyukov, who has worked 17 years in the military plant.

Uralmash general director Victor V. Korovin, a brash 38-year-old, is determined to shake up the backward state-owned behemoth. His first move after taking the job last year was to fire 10 of his predecessor's 11 assistants. Next, he promised quick punishment for tardiness or drinking. Now, he's trying to determine how to avoid bankruptcy and survive the next inflationary jolt when the government releases prices on energy in June.

To cope, Korovin is planning drastic cuts in Uralmash's financing of social services. Subsidies for utilities and maintenance for the factory's 43,000 apartments, its cultural hall, and the local militia will all go out the window. Shifts will be cut back to save energy, and workers will be sent on two-month, unpaid vacations. If worse comes to worst, Korovin plans to issue thousands of pink slips by the end of the year. **HARD-BOILED.** That may sound more like Carl Icahn than Vladimir Lenin. But Korovin believes that hard-boiled style is necessary if Uralmash is to sur-

vive—in any form. Korovin says he abandoned his socialist beliefs after training sessions in the West. In the late 1980s, he worked with Uralmash's joint venture with Austria's Voest-Alpine, a heavy-industry company, and also took a special one-year course for Soviet managers in Frankfurt, Germany, in 1989. "I was a very convinced Communist," says Korovin. "But my ideas changed a lot. Now, I believe that workers should work and make a good wage. It's not up to the enterprise to keep people just as people. Everyone should fend for themselves."

Korovin says he is looking to the West to help pull Uralmash through. He's banking heavily on Western investment to overhaul Uralmash's antiquated plant. He wants to entice a company such as Dresser Industries Inc. to invest in a project to make oil-drilling gear and perhaps eventually buy as much as 25% of the company. "We need about \$500 million in investments," he

figures. But getting big money like that to help rebuild plants is probably a pipe dream. "We are talking about the restructuring of an entire economy. No one has the money for it," says a Western banker in Moscow.

Already, the pain being inflicted inside Uralmash is starting to undermine law and order. For years, crime was virtually unknown, but now soaring prices have sparked a frightening crime wave. Workers complain about thieves breaking in and stealing goods from their refrigerators while they are on the job. One popular research engineer was murdered for his fur hat in early March. Many Uralmash workers are spending their savings on 3,000-ruble steel doors for their apartments.

'NIGHTMARE.' In the worst case, the Great Russian Depression could turn off a maelstrom. It could reach its peak as next winter settles in. Should unemployment reach extreme levels and hunger become common, the stage would be set for riots—or even for the overthrow of Yeltsin. Such a scenario would be a "monumental nightmare," says Marshall Goldman, associate director of Harvard University's Russian Research Center. He envisions such an upheaval as being similar to scenes from the first *Doctor Zhivago*, in which thousands were forced to flee to the countryside during the 1920s.

So far, however, the Russian people have displayed their remarkable capacity for patience. Many Western observers were surprised in January and February, when Russia's population reacted calmly to big hikes in the price of food. Many Russians simply dipped into the ample stocks of food they had squirreled away and lived as best they could. Others turned to cultivating private gardens.

Although the promised aid program from the West can't stop the industrial collapse, it could give the Russians enough money to buy some Western goods and equipment and give more value to the sagging ruble. That could buy time, but no one knows exactly how much. These mornings at Uralmash, workers stream past the sign that proclaims "Glory to the Working Class" and on to their jobs, just as they have ever since the working day for the past 59 years. But they, and the rest of Russia, can hardly imagine what upheaval awaits them.

By Rose Brady
Yekaterinburg, Russia



THE WIDENING GULF BETWEEN EAST—AND EAST

After midnight in Prague, but at one of the Czechoslovakian capital's new private jazz clubs, the tables are packed. Mixing Germans and other West Europeans mix with Czechs drinking beer and telling jokes to Czech friends. You think you're in Berlin. But just 150 miles away in the eastern capital of Bratislava, you would have no such illusion. Except for a few dreary hotel bars where prostitutes wait, the city center is as dead at night as it was under Communism.

The nightlife gap is just one sign of a serious split in Europe's reform tempo. It has long been thought that

economic change would be slow in Poland and Bulgaria, but now differences are also appearing among the nations closest to the West.

CRACKING. Hungary and the eastern portion of Czechoslovakia seem to be on a faster track to join Western Europe. But the pro-secessionist leaders of Slovakia, the poorer republic of Czechoslovakia, are working against a rapid shift to a market economy. Intense political fighting is also undermining economic reform in Poland.

Three of these countries have seen their industrial production drop by 12% to 23% in 1991. Conditions become worse, the West, which just committed billions in aid for the former Soviet Union, could be forced to step up for additional expensive bailouts. Already, Poland has asked the European Community for a \$1 billion emergency loan.

Economists are urging EC countries to let in farm products, coal, and textiles from the East immediately, rather than wait for the planned five- to six-year phaseout of barriers. In any case, the East would get cash that might head off a worse situation in the future. "The dangers are huge," warns Jacques Delors, president of the European Bank for Reconstruction &

Development, who says it is imperative for the EC to open up.

The two-tier trend is being reinforced by foreign investors who are avoiding the poorer regions. To date, Hungary has received \$2.6 billion, or 56% of total investment in East Europe. Another \$1.4 billion has gone into Czechoslovakia—90% to the Czech republic. Only \$1 billion has gone into Poland, the region's most populous country by far.

The gap between the haves and the have-nots is likely to widen in the coming months. Economists predict that both Hungary and the Czech republic will come out of recession within 18 months. But Poland and Slovakia are likely to lag.



PRAGUE: SECESSIONIST TENSIONS ARE BUILDING

TAILSPIN. Economic differences are helping to feed secessionist tensions in Czechoslovakia. Slovakia is hit hardest by reform because inefficient state industry is concentrated there. The Czechs, whose auto and machinery industries are luring German capital, are getting off much easier. A showdown is coming in the June 5 general elections, when a strong Slovak socialist vote could scuttle privatization. Officials in Prague have so far stifled the Slovaks' pleas for restructuring help.

Populist politics is also hamstringing reform in Warsaw. The country's third postcommunist government is struggling in a Parliament splintered among 29 parties. While politicians wrangle, most Polish companies are losing money. Sensing big trouble, President Lech Walesa has entered the fray with his own privatization plan.

Like all of Eastern Europe's reformers, Walesa is feeling pressure to show some positive results from the shifts toward market economies. If a surge in exports to the EC could be arranged, it just might put the front-runners over the top this year. That would send a badly needed signal of hope through the former Soviet bloc.

By Gail E. Schares in Prague

AL WRAPUP

A U.S. company just found out how expensive importing prison-made products from China can be. In a landmark case, a federal judge in Grand Rapids on Apr. 3 fined E. W. Bliss Co. \$100,000 after the Hastings (Mich.) company pleaded guilty to two counts of illegally importing machine presses made in Chinese prisons. The Bliss case marks the first successful prosecution under a 1930 law banning U.S. imports of prison products. Although the misdemeanor count carries a maximum penalty of a \$1,000 fine and a year in jail, the judge used an alternative sentencing provision to slap Bliss

with a higher fine. The prosecution followed a raid on Dec. 2 on Bliss offices by U.S. Customs agents, who have been investigating imports of Chinese prison goods for more than a year (BW—Dec. 23). Bliss says it pleaded guilty to avoid a long, costly trial.

LATIN DEBT

The decade-long Latin American loan mess is finally drawing to a close, and not a moment too soon. A new wave of debt problems is suddenly threatening to clog the world financial system. On Apr. 7, Argentina and its bankers agreed to restructure \$31 billion in foreign debts by swapping some of its existing loans for corporate equi-

ty or new government bonds. With Argentina out of the way, Citicorp and others hope to cut a deal soon on Brazil's \$61 billion foreign-bank debt while trying to restructure the \$15 billion owed by the tottering Olympia & York Developments Ltd. real estate empire.

Those woes pale in comparison with troubles faced by Japanese lenders. They have seen their stock prices fall more than 50% amid worries that their capital will be depleted by the plunging Tokyo stock market and an estimated \$150 billion in nonperforming property loans. And the former Soviet republics are not paying interest or principal on \$21 billion in loans from European and other lenders.

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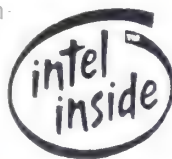


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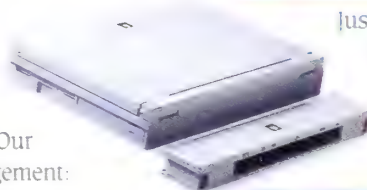


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STERN: BREAKING INTO OLD BOYS' MUNI-BOND CLUB



Ann C. Stern chuckles when recalling her frustration as a freshman lawyer forced to contend with the good ol' boys of the municipal-bond business. Once, for instance, she went to a private luncheon club in Houston to wrap up details of a bond deal only to find a gender-segregated dining room. "We ended up meeting on the women's side," says Stern. "But the men would

the rest room and keep discussing the deal in there." The days, it's Stern who is making the rules. The 40-year-old was recently appointed president and chief executive officer of Financial Guaranty Insurance Co. (FGIC). With a net worth of \$100 million in assets, the subsidiary of GE Capital specializes in insuring municipal bonds against default.

Stern, a University of Chicago law graduate, began her career in New York during the municipal-finance boom of the late 1970s. She made partner at Wood, Dawson, Smith, and in 1984, she was approached by Financial Guaranty to become its general counsel. Stern has worked in every phase of FGIC's operations and was key to both its expansion overseas and its 1986 public offering.

At FGIC's helm, Stern plans to stay the course: insuring municipal bonds, while carefully pursuing structured-finance deals. After years in finance, caution is her credo. Says Stern: "Companies go wrong when they don't stick to their knitting."

DENNIS PAWLEY: IMPROVING CHRYSLER'S JAPANESE ACCENT

Dennis K. Pawley, Chrysler Corp.'s top manufacturing executive, is adding when he says work is the key to retaining the cash-rich auto maker. Take it when he walked out of a meeting with a Japanese executive. "You're wasting my time," he said. After it became clear that the Japanese managers had no business plan, Pawley said, "Dennis is fundamentally changing our manufacturing culture by empowering the people to do what they can do," says President Robert A. Lutz.



Pawley's fledgling recovery could hinge on his efforts. Pawley, 50, is the point man in Chrysler's push to modernize and streamline product-development efforts. He's implementing a more efficient manufacturing approach in which engineers, plant engineers, and production managers work in tandem under one budget to design cars that are easily assembled. With Chrysler's recent turmoil over finances and suc-

cession, manufacturing is providing the one bright light. Three new models will roll into showrooms this year: the racy, image-boosting Viper, the Jeep Grand Cherokee, and, most important, a fresh line of handsome midsize sedans.

To reverse years of autocratic thinking, Pawley spends hours walking the plant floor both encouraging worker input and demanding greater accountability. If that sounds Japanese, it is. Although Pawley spent the early part of his career at General Motors Corp., in 1986 he became Mazda Motor Corp.'s top U.S. manufacturing executive. He immersed himself in Mazda's culture, from singing *karaoke* to forging teamwork on the shop floor. But a work culture where uniformed workers labored silently left him feeling like a "well-paid executive robot." In March, 1989, he defected to Chrysler.

Pawley rose quickly to executive vice-president for manufacturing under Lutz. But now, his career will likely depend on how he gets along with Robert J. Eaton, the former GM executive recruited by Chrysler's board to replace Chairman Lee Iacocca at the end of this year. Says Pawley: "Explaining to an outsider what's happening at Chrysler is like trying to explain the concept of air to a fish." Maybe so. Pawley, though, has little choice but to swim with the tide.

PETER PIRNER AND ANDREW HINES: HIGH JUMPERS AT ADIDAS

Throughout the 1970s, Adidas left its competition in the dust. The German shoemaker's three-stripe trademark was a good way to tell the serious athlete from the impostor. By the late 1980s, though, Adidas' U.S. business had grown fat and bureaucratic. While rivals Nike Inc. and Reebok International Ltd. sprinted ahead with slick new shoes for every sport, Adidas USA lost \$140 million between 1986 and 1989.



Enter Peter Pirner, 51, and Andrew Hines, 52, two American executives brought in by the Germans to clean up the U.S. subsidiary. Pirner, a longtime Mattel Inc. marketer, and Hines, a tough cost-cutting specialist from RJR Nabisco Inc., put the company on a crash diet and launched a new-image campaign. The result: a \$2 million profit in 1990.

The duo slashed jobs by half while cutting vice-presidents' pay by 10%. Moving offices from Warren, N.J., to an Adidas warehouse in Spartanburg, S.C., will squeeze even more. "Part of the culture was a belief that our parent company had deep pockets, that Adidas USA was a quasi country club," says Hines. "We had to change that perception."

Adidas USA is leaner and meaner, but it lost money again in 1991. The trick now will be boosting revenues. That's where marketing man Pirner comes in. Adidas can't catch up with Nike and Reebok. But Pirner plans to exploit the company's sole advantage: its image as a classic. He is promoting a new line of high-end shoes dubbed "Equipment" with ads urging athletes to get "back to basics." Don't count on air pillows or pumps. "You can't outgimmick a gimmick," Pirner says. But the days of running in place may be over.



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THE FREQUENT TRAVELER

EUROPE'S CHANGING LANDSCAPE

**A barrier-free market is
reshaping the way Americans
conduct business abroad**

IT SEEMS FITTING THAT 1992 MARKS both the 500th anniversary of Christopher Columbus' first voyage to the New World and the first year of the new Europe.

That's because the 12 countries that make up the new European Community—Belgium, Denmark, France, Germany, Great Britain, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain—are embarking on a bold voyage of their own, one that will create a barrier-free market among otherwise sovereign states.

What this means for business travelers is the elimination of virtually all checkpoints between member countries. Someone flying into Frankfurt with stops in four other EC countries will pass through passport control and customs only twice: once upon arriving



THE FREQUENT TRAVELER

in Germany and again before leaving. In other words, going from, say, Italy to France is liable to be as hassle free as driving from Illinois to Indiana.

Other modifications will be more subtle. Everything from tariffs to speed limits is expected to be standardized. The EC has even adopted a new currency, known as the Ecu for "European Currency Unit," although Great Britain has thus far balked at surrendering its beloved pound sterling.

Don't expect these changes to occur overnight, though. Some, such as relaxed passport control, have been phased in over the past several years. Others may take a decade or more to implement. The Ecu, for example, isn't expected to be fully introduced until 1999. Still others, in the face of stiff opposition from member countries, may never come to pass. What is certain is that, like the New World after Columbus hit town, Europe will never be the same again.

Following is a summary of what business travelers can expect to find on their next trip across the Atlantic.

A CELLULAR REALITY

Despite the continent's disappearing borders act, cellular phone users will, at least for the next few years, continue to be limited in how far they can roam.

In cellular terms, each country remains an individual fiefdom, with its own system, separate and distinct from all others. In other words, neither an American nor an Italian traveling in the United Kingdom can reach out and



touch someone using phones brought from their respective homes.

Thankfully, these telecommunications turf wars should end when a new digital cellular network goes on-line over the next few years. Called the Global System for Mobile Communications (GSM), the system will feature across-the-continent compatibility as well as two to three times the available subscriber capacity, tighter security, and faster and more accurate data transmission. Concurrently prices should also drop, as manufacturers take advantage of economies of scale that result from producing phones for an entire continent instead of just individual countries.

GSM is already being test-marketed, and plans call for full-service in major European cities by next year, which means coverage over about 70% of the continent. Still, don't expect seamless

cellular service until the end of 1996, the earliest, when major airports, suburbs, and secondary cities are expected to have been brought into the GSM loop.

RAPID TRANSIT

European railroads have long been miles ahead of their American counterparts. Now, they're getting even better. While manufacturers on this side of the Atlantic are just beginning to dabble in faster-than-a-speeding-Schwinn trains in Texas, Florida, and California/Nevada, the Europeans—particularly the French—have been zipping around their countryside at 125 mph-plus for nearly 20 years.

And things are going to get even zippier. From Spain to Sweden, Italy to Germany, high-speed rail travel is becoming the norm. So much so, in fact, that a recent study by the Association of European Airlines said that these lines are cutting into air traffic on 110 intra-European routes, and that carriers risk losing up to 20% of their business to trains.

The primary reason for this shift has to do with saving time. Rome to Milan, for example, is less than four hours on Italy's 150-mph ETR 450. And that trip will get even shorter once the next-generation ETR 500, which reaches speeds of 180 mph, goes on-line. Visitors to this year's Seville Expo will be able to travel to Madrid in under three hours on Spain's new AVE (Alta Velocidad Española or Spanish High Velocity) line set to open this month.

But speed isn't the only area in which European trains rival planes. Onboard amenities compare favorably with those of the best business-class, or even first-class, airline cabins. Passengers on France's TGV, for example, enjoy at-seat meal service, while Germany's InterCity Express features conference rooms, increased legroom, and airplane-like music systems built into each seat.

THE FREQUENT TRAVELER



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perfect world, a business traveler runs short of cash while in Europe and be able to whip out his or her card and use it in the first Automatic Teller Machine he or she sees. And there's no such thing as a perfect world.

Although ATMs are about as widespread in Europe as they are in the United States, the two systems are not as tightly interconnected as travelers hope.

While agreements between United States and European ATM networks continue to proliferate, technological glitches often stymie would-be users. An ATM might sport such familiar logos as Visa, MasterCard, Plus, or Cirrus, yet stubbornly refuse to accept a foreigner's card because it can't read the magnetic strip on the back. For this reason never leave home without at least one form of financial backup. A major charge or credit card, traveler's checks or even cash dollars are reliable standbys.

When they do work, the convenience of finding an ATM in every airport, hotel, or bank far from home comes with a price. Typically users pay either a

transaction fee or a percentage of the withdrawal amount. The extra fee is determined by agreements between the networks, although it's usually not much more than what it would cost to make a similar withdrawal from an ATM at your neighborhood Stop-N-Go or Kroger supermarket.

For an up-to-date list of ATM locations and usage fees, contact either your credit card or ATM card issuer directly.

INN STEP

Perhaps more than any other business, hotels will remain relatively unaffected by changes brought about by the establishment of the European Community. Already a vastly internationalized industry, hotels have for years easily crossed all but the most rigid of national borders, a process that will continue.

For American business travelers, familiar hotel names will dominate the landscape. Marriott, for example, has opened four new properties in Germany over the past few years, while Radisson recently signed a management agreement with nine Edwardian hotels, which will now go by the name Radisson Edwardian in the United Kingdom. The

point is to attract both American and European executives through increased brand awareness.

But European-based chains are also actively courting the business market. Penta International, whose new hotel in Salzburg opened ahead of schedule, is set this year to open properties in Lubeck and at the new Munich airport. In 1993, Penta will open hotels in Linz, Milan, and Prague. Kempinski, the well-regarded German outfit, offers travelers a Lufthansa check-in counter at many of its establishments. Guests who check their luggage before leaving the hotel won't have to deal with it again until they reach their final destination, whether that's Frankfurt or Dallas/Fort Worth.

Any specific changes that do take place are liable to be behind the scenes. Because it will be easier for workers to travel among the EC states, hotels will more readily shift employees among properties, moving, say, an experienced general manager from a hotel in Milan to one just opening in Brussels. The pay-off should be better, more consistent service across the board.

In addition, many properties are experimenting with significant discounts. According to a recent article in *Frequent Flyer* magazine, recessionary pressures are forcing European properties to offer special deals on their otherwise sacrosanct rack rates.

Rank Hotels, for example, recently ran a promotion allowing travelers to book rooms at its five London establishments for the same number of dollars as the published rate in pounds. Instead of paying £200, guests paid only \$200, or a 45% discount off the top. For its part, Inter-Continental last year ran a Winter Spectacular promotion in which rates were cut by as much as 30% in Paris and London and a full 50% in Athens. Others hope to attract frequent business travelers with such perks as dinner discounts, sightseeing, even personal accident insurance coverage during their stay. □

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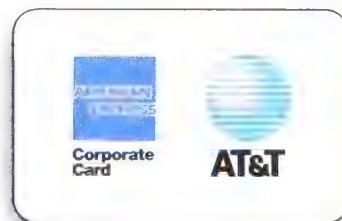
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Poqet PC Prime computer

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POQET PC PRIME COMPUTER

By shrinking the familiar desktop computer down to a size that fits in the palm of one hand, the Poqet PC Prime computer (\$1,295) offers a clear demonstration that the days of the big footprint are numbered. Replacing the conventional display screen and bulky disc drives with a flat 8-inch LCD read-out and twin integrated-circuit card slots allows the 1.2 pound Poqet to offer the

functions and operating environment of a standard full-grown XT computer in a package that's 8.8 by 4.3 by 1 inch.

Based on an 80C88 processor running at 7 MHz, the Prime has a full 640-kilobyte RAM internal memory and 768 KB of ROM; built-in software includes MS-DOS 3.3, GW-BASIC, and PoqetTools Utilities, which handles calculator, address book, memo, and modem functions. Supporting both monochrome and

CGA graphics, the 80-character, 25-line display gives users the same full-screen view as a desktop monitor, and the XT style keyboard is only 20% smaller than normal size. Files may be easily transferred to and from other computers via a serial cable and the supplied communications software. Optional memory storage cards come in sizes up to 4 MB. Preprogrammed versions of popular software currently available include Lotus 1-2-3, LotusWorks, ACT!, XyWrite II Plus, and WordPerfect 5.1. The Poqet PC Prime is powered by two ordinary AA alkaline batteries, which provide enough juice for about 100 hours of operation.

MOTOROLA MICROTAC LITE

Anyone who's ever envied the ease with which Captain Kirk of "Star Trek" flip open his communicator to call home can enjoy the same futuristic thrill with Motorola's new MicroTAC Lite Digital



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Plunge into luxury, poolside at a Sheraton Hotel. It's one way to take advantage of ITT Sheraton's billion dollar improvement. And across the country, enjoy our new health clubs, guestrooms, restaurants, lobbies and enhanced services. For reservations, call your travel professional or 800-325-3535. We spent a billion to make you feel like a million.



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SHERATON HOTELS OF CANADA: • Chateau Cartier Sheraton Hotel and Golf Resort, Aylmer • Sheraton Cavalier Hotel, Calgary • Sheraton Halifax Hotel • Sheraton Hamilton Hotel • Sheraton Armouries Hotel, London • Le Centre Sheraton Hotel and Towers, Montreal • Sheraton Fallsview Hotel and Conference Center, Niagara Falls • Sheraton Cavalier Hotel, Saskatoon • Sheraton Toronto East Hotel and Towers, Scarborough • Sheraton Centre Toronto Hotel and Towers • Sheraton Parkway Hotel Toronto North • Sheraton Landmark Hotel, Vancouver • Sheraton Chateau Vaudreuil • Sheraton Winnipeg Hotel

THE FREQUENT TRAVELER

Sony Data Discman

Personal Communicator (about \$1,200). Since their introduction in 1989, MicroTAC series cellular telephones have consistently shattered size and weight barriers with breakthroughs in styling and efficiency. This latest and lightest model carries on the tradition of offering executives a truly portable, personal way to keep in touch at home or on the road.

Sporting the MicroTAC's signature space-saving hinged mouth-piece, which folds up over the keypad to close the phone like a wallet, the Lite is 20% smaller and 35% lighter than its nearest competitor. When equipped with the rechargeable standard battery, it measures 11.6 cubic inches, weighs only 7.7 ounces, and offers up to 45 minutes of continuous talk time (8 hours standby). Replacing the standard battery with the supplied Talk PAK XT battery extends this to a full 2.5 hours (24 hours standby), yet the phone still comes in at just 14.5 cubic inches and 9.6 ounces.

The MicroTAC Lite comes with three rechargeable batteries, a travel battery saver, a rapid charger, and a convenient carrying case.

SONY DATA DISCMAN

Sony's Data Discman is revolutionizing the new age of electronic publishing. Taking its cue from the CD-ROM storage systems that are a familiar part of the computer world, this hand-held, battery-powered unit reads Electronic Books encoded on interchangeable compact optical discs. Although the silvery 3-inch discs look small, each can hold the equivalent of 100,000 pages of text. Rapid-access capability means that users can instantly navigate through the contents of the entire disc at the touch of a button. The 1.5-pound player is about



the size of a large paperback book, and features an alphanumeric keypad and a flip-up monochrome LCD screen that can display both text and graphics.

Once an EB disc is inserted, users choose the appropriate search mode with an on-screen cursor and enter the desired topic via the keyboard. Special symbols in the displayed articles indicate cross-references to related entries.

Happily, this operating procedure

never varies from disc to disc, ensuring that consumers only have to learn one short set of instructions to utilize any of the 23 Electronic Books currently available. The Data Discman comes with all 26 volumes of *Compton's Concise Encyclopedia*, the *Wellness Encyclopedia* and *World Translator*, for \$549.95. Software titles, priced from \$29.95 to \$69.95, include the *American Heritage Dictionary & Roget's II: The New Thesaurus*, the *International Wine Guide*, the *Official Airline Guide*, *Total Baseball*, and the *Library of the Future*, a single disc comprising the full texts of 150 classics.

CANON UC CAMCORDERS

In creating its new lightweight UC family of 8mm camcorders, Canon started from the ground up, reconfiguring and reengineering the traditional design of virtually every component. The result is a trio of ultraslim, high-performance video cameras that let budding auteurs capture all the action without being immobilized by bulky equipment. All three incorporate internal autofocus zoom lenses, seven shutter speeds from 1/100 to 1/10,000 of a second, hi-fi stereo sound, on-screen menus offering step-by-step instructions, and several power options. When connected to a TV set they do double duty as playback unit, and their detachable full-function wireless remote controls make for easy operation from armchairs up to 16 feet away.

The top-of-the-line UCS1 (\$2,099) offers videophiles maximum picture quality by combining the latest Hi-Band video recording technology with a 410,000-pixel CCD for high-resolution images. It's equipped with a 10x zoom lens, seven autoexposure modes tailored for special situations such as portraits, sports and the bright outdoors, close-up autofocus down to .4 inches, and a character generator for creating titles. It weighs

Motorola MicroTAC Lite





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THAT IMPORTANT
PRESENTATION.

When you fly British Airways Club® Class, you'll enjoy our renowned British service that pays attention to every little detail. You'll arrive refreshed and ready to handle anything that needs your personal attention.

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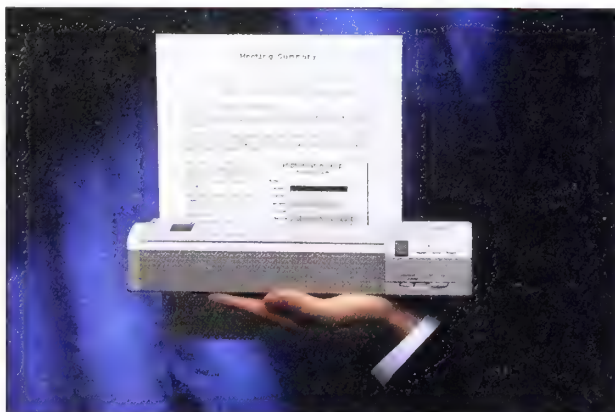
The world's favourite airline.®

THE FREQUENT TRAVELER

1.6 pounds, without battery or tape, and measures 3 1/8 inches wide by 6 13/16 inches in diameter by 5 11/16 inches high. The new UC20 (\$1,849) is identical to the flagship model, but uses traditional 8mm recording instead of Hi-Band technology. Those looking for something even smaller and lighter should check out the trim UC (\$1,499), which sports an 8x zoom lens and has no extra autoexposure modes, but weighs in at just 1.3 pounds.

CITIZEN PN48 PORTABLE PRINTER

A computer's best friend may be a printer, but until recently they've been too bulky to carry around. While portable computers have become commonplace, miniature printers are just beginning to make an impact. Citizen's PN48 Notebook Printer Professional System (\$549) raises portable productivity to a new level by producing true laser-quality documents wherever and whenever necessary. The PN48 is small enough to keep a notebook computer company in a briefcase because it measures just 11.7 inches wide by 3.5 inches deep by 2 inches high, and weighs 2 pounds (2.5 with rechargeable battery). Quiet and quick, the PN48 works with all types of paper, stationery, envelopes, labels, and even transparency presentation film;



Citizen PN48

printing a standard-size page takes as little as a minute.

User options include the choice of roman or courier fonts, eight different type pitches, and the use of any combination of eight type styles. In addition, the PN48 can also handle graphics. It comes with a rechargeable battery good for about 25 pages, an AC adapter/charger, printer cable, manual on diskette, and a soft carrying case.

RICOH PF-1 PORTABLE FAX

When new technology revolutionizes the way business is conducted, it soon becomes just as vital on the road as it is in the office. It wasn't too long ago that the fax machine transformed the workplace, and now when duty takes businesspeople away from home base, the Ricoh PF-1 Portable Fax (\$1,495) is ready to travel along. Measuring just 11 by 7 by 2 inches and weighing only 5.5 pounds, the unit stows away comfortably in a briefcase with room to spare. Certified by the *Guinness Book of World Records* as the "world's smallest facsimile machine," the PF-1 can transmit or receive full-size 8.5 inch by 11 inch documents at about 30 seconds per page.

Since the PF-1 is compatible with any standard or cellular telephone, business travelers can send or receive hard copy

from just about anywhere. Reliable cellular transmission is facilitated by the special Error Correction Mode, which reduces mistakes during sending by automatically preventing the receiving fax machine from printing until the transmission is verified and completed.

The PF-1 comes with a rechargeable battery pack and charger, an automobile adapter to supply power from a car cigarette lighter, and an AC adapter to plug into standard wall outlets.

WIZARD ELECTRONIC ORGANIZERS

Life without a secretary can be a confusing jumble of appointment slips, hastily scribbled notes, tattered plane schedules, and phone numbers entombed in overstuffed pockets or purses. While it hasn't been clinically proved that consolidating, organizing, and simplifying information overload will reduce stress, the latest additions to Sharp's well-known Wizard line are sure to take some of the bumps out of life on the road. Slightly smaller than other Wizard models (only 5.8 by 3.8 by .7 inches when closed) and weighing just 1.5 ounces, the OZ-7600 (\$299) and OZ-7620 (\$329) share a unique ergonomic design, highlighted by a thumb pad which sits comfortably in the hand. The units open vertically to reveal a bottom half that contains all major control keys and a keyboard in the traditional typewriter-style QWERTY arrangement. On top are a 16-character, 8-line LCD screen, and a touch-sensitive window slot that accepts optional integrated circuit (IC) cards for either software programs or memory storage. The 7600 carries 32K of onboard memory, while

Ricoh PF-1



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SOMETHING YOU CAN DEPEND ON
WHEN YOU GO FOR THE GREEN.**

"I hate missing an important call as much as I hate missing a shot.

"That's why, whenever I'm out, I rely on the durability of my Motorola cellular phone. They're built to take whatever I dish out.

"It's the way smart people stay on top of their game."



MOTOROLA
Cellular Telephones

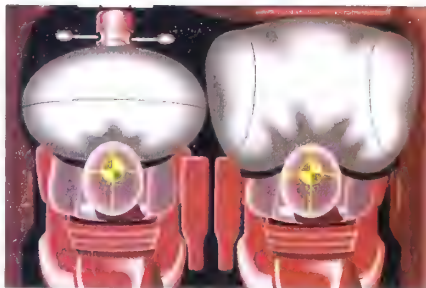
Technology that can take it.

Sable Presents S



1 DUAL AIR BAGS

This year's Mercury Sable offers both a driver and optional right front passenger air bag Supplemental Restraint System—a feature not offered by any other manufacturer in this class. (Manufactured by Ford Motor Co.) Remember to always wear your



safety belt even though your vehicle is equipped with air bags.

2 ANTI-LOCK BRAKES

A safe driver is a driver in control. Even when braking on ice, snow or rain-slick roads. Sable's available 4-wheel disc anti-lock braking system helps keep the driver in control regardless of road conditions.



ty in Numbers



**CRUMPLE ZONES
ABSORB IMPACT**

er end of Sable, crumple
elp absorb the brunt of
ct before it reaches the
er compartment.

**4 CHILD-PROOF REAR
DOOR LOCKS**

If you're driving with young children, you'll be pleased to know Sable is equipped with child-proof door locks. A flick of a switch and the rear doors cannot be opened from the inside.

These are just a few of the safety features built into the Mercury Sable for 1992. Features that aptly support the old adage, "There is safety in numbers."

1 800 446-8888

 **MERCURY SABLE**



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HERE.

RENOVATIONS HERE, THERE AND EVERYWHERE.

Unlike some of our competitors, we're continuing to refurbish our hotels, like The Waldorf=Astoria and the Chicago Hilton and Towers, from lobby to penthouse. We've also added exciting new properties, like The Pointe Hilton Resorts in Phoenix.

THERE'S SOMETHING HAPPENING HERE.

We've created a new Hilton image, as evidenced by our brand-new signature, to underscore our commitment to continuous improvement. So, next time you're hoping for more from a hotel when you're on the road, wake up here. At Hilton.



THE FREQUENT TRAVELER

the 7620 is equipped with 64K.

Basic information and time management duties are handled by the Wizards' built-in functions, which include a telephone directory that can retrieve data by name, company name, or phone/fax number; a daily schedule to store descriptions of the day's engagements; a memo mode for making notations; a 200-year calendar to check appointments into the next century; a clock to keep track of the time in more than 200 cities around the world; a calculator; and password protection to prevent unauthorized access. An index function allows a convenient overview of all information, and the brand-new User File option, unique to these two models, permits users to create a customized data base with up to 16 individually defined fields.

The expanding library of Wizard IC cards performing specialized functions further broadens the versatility of the 7600 and 7620. Consumers can create Lotus 1-2-3 compatible spreadsheets, perform advanced scientific calculations, track and graph investments, connect to on-line services like CompuServe, consult the King James Bible, check spelling and synonyms, translate eight languages (including Chinese and Japanese), or just brush up on their chess, backgammon, or the new computer game Tetris.

DENON DTR-80P DIGITAL AUDIO TAPE RECORDER

For audiophiles, DAT is the hottest acronym in the entertainment alphabet. The Digital Audio Tape format is the most sophisticated consumer recording technology available, and it gives music lovers the ability to make their own digital recordings with the same sonic fidelity found in the best CDs. Essentially a palm-size edition of a professional recording studio, Denon's DTR-80P

(\$900) is equally ready to play back prerecorded DAT cassettes or record digitally from analog, digital, or live sources. With performance specs comparable to Denon's nonportable DAT units, the DTR-80P comes in at 3.5 by 1.5 by 6 inches and at about 1.5 pounds with battery. In addition to superb



Canon UC20

sound, there's another particularly appealing advantage for conference-bound executives: Since it can record up to four hours on a single cassette, it eliminates the need to change tapes when capturing lengthy meetings or lectures.

LEICA MINI 35MM CAMERA

Everyone knows what a picture is worth, and the challenge of getting those proverbial thousand words properly exposed and focused is literally a snap with the Leica Mini 35mm camera (\$415). The latest supercompact from the venerable company that invented 35mm photography measures a mere 4.5 inches long by 1.5 inches wide by 2.5 inches high, but packs automatic exposure and flash, autofocus, auto advance and rewind, and automatic film-speed setting. Leica's optics are legendary in the photo world, and the Mini is outfitted with a specially designed Elmar f/3.5 35mm lens. □

MINNESOTA
Minneapolis Area
Minneapolis Hilton
Bloomington Minneapolis
St. Paul Airport Hilton
Minneapolis Metrodome Hilton

NEW JERSEY
Newark-Hilton Gateway
Parsippany Hilton
Secaucus Meadowsland
Hilton
Short Hills-Hilton at Short Hills
Somerset Hilton

NEW YORK
Buffalo Hilton
New York Area
Jamaica JFK Airport Hilton
Long Island Whiskey
Huntington Hilton
New York Hilton and Towers
The Waldorf Astoria
New York Area/
Westchester County
Rye Brook-Rye Town Hilton
Tarrytown Hilton Inn
Syracuse-Hilton at
Syracuse Square

OHIO
Akron Hilton Inn at Quaker
Square
Akron West Hilton Inn
Canton Hilton
Cincinnati Area
Florence, KY-Commonwealth
Hilton
Dayton-Daytonian Hilton

OREGON
Portland Hilton

PENNSYLVANIA
Harrisburg Hilton and Towers
Philadelphia Hilton and
Towers
Philadelphia-
Valley Forge Area
King of Prussia-Valley
Forge Hilton
Pittsburgh Hilton and
Towers

SOUTH CAROLINA
Greenville Hilton

TENNESSEE
Nashville Area
Brentwood Hilton Suites

TEXAS
Dallas Area
Grapevine-DFW Hilton
Executive Conference Center
El Paso Airport Hilton
Houston-Westchase Hilton
and Towers
San Antonio-Hilton Palacio
del Rio
Waco Hilton

UTAH
Salt Lake Airport Hilton

VIRGINIA
Lynchburg Hilton

WASHINGTON
Seattle Airport Hilton
Seattle Hilton

CONRAD HOTELS

ENGLAND
London-Grand London

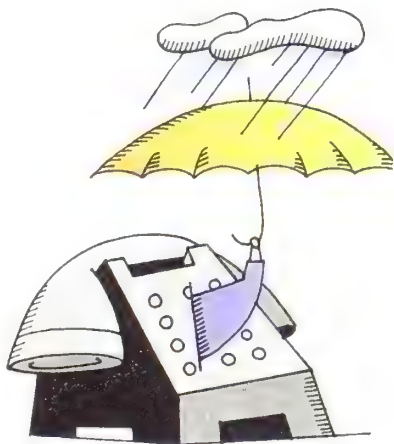
HONG KONG
Hong Kong-Conrad Hong Kong

IRELAND
Dublin-Conrad Dublin

TURKEY
Istanbul-Conrad Istanbul



THE FREQUENT TRAVELER TIPS



WEATHER OR NOT: IT'S YOUR CALL

TIRED OF RELYING ON OPTIMISTIC, but often misinformed, weather forecasters? Thanks to the boom in 900 numbers (now even the Pope has one), it's easier than ever for travelers to get the scoop on current weather conditions at destinations throughout the world. Local (non-900) hot lines have been around for years, but lately the trend has spread nationwide. Tops in the field is the Weather Channel Connection, which recently absorbed American Express' 900-WEATHER. Ninety-five cents per minute yields detailed forecasts for more than 650 American cities and over 250 spots overseas, in addition to specialized twists like ski reports and fall foliage bulletins. Less comprehensive (600 cities worldwide) but also less expensive (75¢ per minute) is *The New York Times* Weather Watch at 900-884-CAST. Meanwhile, *USA Today's* weather and travel hot line at 900-555-5555 combines forecasts with airline flight information for selected cities (95¢ per minute). Alternatively, to chat with a real live person call the National Weather Service in Maryland (301-763-8155) for longer range forecasts.

BUSINESS, IN A CLASS OF ITS OWN

AFTER YEARS OF MIXED SIGNALS, U.S. carriers are renewing their competition for the business traveler. Among the highest-profile evidence is the rush to provide business-class service—formerly limited mostly to international flights—on certain domestic routes as well.

Until recently, only TWA and the premium MGM Grand Air offered this option to their domestic passengers. But a series of factors led rivals Delta, United, and American to follow suit on selected long-haul flights. For the lucrative



New York-Los Angeles route, market leader American reconfigured ten DC-10s to create a new 52-seat section called Flagship Service. Delta, meanwhile, has introduced a 28-seat Business Class on the Airbus 310 widebodies it purchased from Pan Am. And United has between 32 and 70 Connoisseur Class seats on each of 150 flights to and from the West Coast from a number of airports.

Why the move to business class now? As more companies nix first-class travel (where many transcontinental round-trip fares run \$2,100 or more) for their employees, airlines hope to market domestic business class as a luxurious yet lower-priced alternative. Some also cite the need to satisfy passengers en route to or from Europe or Asia, who were forced to fly coach on the domestic legs of their trip. And, of course, many business travelers have objected to paying full fare for seats that cost others around them substantially less. Finally, the new three-class service will help preserve the hallowed nature of first class by prohibiting upgrades to that level from coach. (Upgrades by one class will still be permitted, usually with an additional fee.)

Of the five carriers, TWA, whose

DUTY-FREE HOLDS FAST

With the impending economic unification of Western Europe, airport shoppers may have wondered about the fate of duty-free. Rest easy. Plans to eliminate duty-free shopping on trips between any of the European Community's 12 member countries when they join to become a single market have been shelved for another six years. Reason: pressure from commercial interests, particularly in Great Britain, which accounts for a third of all intra-EC duty-free sales. So until 1999, anyway, bargain hunters can still buy luxury goods at each country's points of entry without being taxed. Given a minimum VAT of 15% this can really add up to some substantial savings.

THE FREQUENT TRAVELER

sador Class has been around for a
still charges the least by far for its
Continental Ambassador seats (\$1,100
trip, as opposed to a minimum of
for the others). Five-year-old MGM
(which flies DC-8s with 75 seats
usly configured four to an aisle)
first- and business-class level service
the latter costs about the same as
ounted coach on other airlines.
is the wave of the future? A Delta
man says he doubts domestic
ss class will go much further. TWA
lower fares will be more impor-
the business traveler, in first as
business class. But at American
ase for the 90s, as far as first and
ss classes go, is "passenger
l" of his or her environment. And
tom line, points out their spokes-
is the "need to give people what
ceive to be value and quality."

WORKING AT ART A NEW WAY

SETTING MAY NEVER BE MIS-
en for the Metropolitan Museum
but U.S. airports have become an
ected venue for art. What's more,



Beaumont Newhall's photograph of Ansel Adams is at the Albuquerque International Airport.

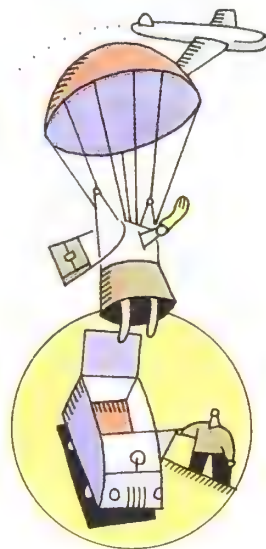
it's not the paint-by-numbers stuff it once was; we're talking Miró, Calder, Dalí, and Picasso here. Established in 1969, the collection at New York's John F. Kennedy International Airport is the country's oldest as well as the most extensive, with more than 200 works by world-renowned artists. But major-league exhibits—some with full-time curators—can also be found at Boston's Logan, Chicago's O'Hare, and airports in San Francisco, Albuquerque, Phoenix, Seattle, and Miami. If the multimillion-dollar art budgets for Pittsburgh's and Denver's new airports are any indication, these intriguing galleries are, shall we say, really taking off.

INSURANCE FOR FREQUENT-FLYER MILES

collapse of Eastern, Midway, and Pan Am and the uncertain futures of several other majors have some travelers concerned about the value of their hard-earned frequent-flyer miles. For this reason, the Frequent Flyer Club has launched its AwardGuard Membership Plan, currently the only program that insures frequent-flyer mileage. Membership, which costs \$79 annually, offers protection for more than a dozen carriers in the United States and Canada, as well as coverage for several hotel, frequent-guest and other travel programs. If a company ceases to honor its frequent-flyer commitments and no other line picks up the slack, policyholders can redeem those miles for a ticket—purchased by AwardGuard from one of 100 travel agencies affiliated with Thomas Cook—to any destination involving similar mileage, usually on the airline of the passenger's choice. AwardGuard membership benefits include a monthly newsletter, access to a free helpline, and flight insurance on the free award ticket. For more information call 800-487-8893.

INSTA-RENTAL CAR

IT'S NO WONDER THAT BUSINESS travelers shudder at the thought of picking up and dropping off airport rental cars. After six or more hours on the road, the last thing you need to deal with is another hour in line waiting for wheels. Well, increasingly the major car-rental outfits are making your life easier. Alamo recently joined the list of firms that have set up streamlined procedures to get you in or out of your car in minutes. Alamo's express service is now in place at 32 U.S. locations, and pares drop-off time to less than a minute. Hertz's #1 Club Gold Service was recently augmented by a slightly more



modest Gold Key Service, together covering 160 American airports. Avis offers strong competition, though, with its Preferred Express program (which, like #1 Club Gold, has an annual membership fee of \$50). This program includes ATM-style computers that process rentals on the shuttle bus from the departure terminal. National's Emerald Club costs \$75 a year, but members have the added advantage of being able to choose from a selection of cars right on the spot.

THE FREQUENT TRAVELER

LONG-DISTANCE SERVICE

CLEARLY, CELLULAR phones have significantly altered the lives of many business travelers. But don't be too quick to dismiss the stationary kind. The very definition of "telephone" is being expanded, with scores of new services coming on-line in the nineties, which may help revolutionize long-distance communication. AT&T's new video pay phone, called Public Phone 2000, uses charge cards not just for regular calls but also to access three-way calling, voice mail, computer and fax hookups, features for the deaf and hearing-impaired, and



information services (initially only weather but due to be expanded). AT&T already has the phones in a number of airports—including New York's JFK, Newark, Dallas/Fort Worth, and Orlando—and expects to have them in 80 more by

late 1992, in addition to convention centers and nine top American hotel chains.

Another company, Spectradyne, which supplies Spectravision pay movies and other in-room entertainment to hotels, is test-marketing a gadget called Access Phone. By running a charge card through the unit, users in hotel rooms and lobbies can have long-distance calls billed directly to their card accounts.

DOWN TO THE WIRE

LET'S FACE IT. HAVING FUNDS WIRE Labroad can be a major inconvenience. For one thing, a recipient may have to wait several days for the money to arrive. For another, when it finally does show up, it probably will come either as U.S. dollars, a bank check, or both, thus causing additional headaches (not to mention fees) for conversion to local currencies. The process has now been made a bit easier since Chequepoint, a Belgian financial services company, introduced Transcheq, which makes wiring money from the United States as easy as sending a fax. Payment is accepted on the U.S. end in cash,

Business class like



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Daily nonstop flights to Scandinavia with easy connections

SAS IS A PARTICIPANT IN THE MILEAGE PROGRAMS OF CONTINENTAL AIRLINES

THE FREQUENT TRAVELER

er's checks, or credit cards, and the
e fee is \$15 for up to \$500 wired,
\$50 for each additional \$500.

ern Union charges \$20 for up to
st \$500, and the American Express
yGram costs a minimum of \$25.)
h other wiring services, transac-

must be
in person.
Transcheq
rently
ble only
New York
ndon,

tar, and Hong Kong, but additional
nd overseas locations are expected
en in the near future. For more
nation, including a list of Cheque-
offices, call 212-980-6443.



AIRPORT PARKING: A WHOLE LOT BETTER

THE LATEST AIRPORT BUILDING boom has spawned a corresponding boomlet of sorts in the construction of new parking lots. At Washington, D.C.'s

National Airport, visitors will find the huge four-level South Parking Facility, situated across from the main terminal. The 2,100-car structure increases the number of parking slots at

National by a third. Just down the road a piece, Baltimore-Washington International Airport has built a 2,800-space garage, featuring a below-ground passageway into the passenger terminal. Not

to be outdone by its East Coast counterparts is Salt Lake City International's new short-term facility, where passengers are whisked from their cars to the terminal by moving walkways. Tampa airport goes that yet one better, with a monorail that carries travelers between its massive new five-floor structure and all passenger concourses.

Already existing parking lots have been upgraded as well. At the three major New York City area airports (Kennedy, LaGuardia, and Newark), customers can prepay their parking charges with Visa and MasterCard at machines located in baggage-claim areas, or use the credit cards to make a faster getaway from the lots themselves.

u never dreamed.



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SCANDINAVIAN AIRLINES

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SMOKE-FREE TREND ADVANCES IN HOTELS

It's been a decade since America's first smoke-free hotel, the Non-Smokers Inn in Dallas, opened its doors. But it wasn't long before others followed suit. Today a good number of individual hotels and nationwide chains (including Hyatt, Sheraton, and Radisson) have set aside a significant number of rooms for nonsmokers only; the industry average is 35%. One chain of all-suite hotels, Homewood Suites, recently increased the percentage of its rooms reserved for nonsmokers to 75%. In Europe, too, a few establishments are promoting themselves as smokeless. It's even possible to order a guidebook to the U.K. called "Eat, Drink & Sleep Smoke-Free" (available for \$21.70 from Royal Mail; call 800-843-9078).

RULES OF THE ROAD IN THE SKY

AS MORE AND MORE BUSINESS travelers take their work along in the air, questions about what items they can bring on board and what must be left behind grow more and more complex. Recently, for example, the Federal Aviation Administration reversed its ban against passenger use of cellular phones on aircraft, originally enacted on the grounds that the devices can cause radio interference with navigation. Now, the airline industry watchdog says cellular phones may be operated while a plane is parked at the gate or during longer waits out on the tarmac, but not while taxiing or in the air. More to the

point, the FAA is leaving it up to individual airlines as to whether or not even this limited use will be allowed. By the way, for the same reason that cellular phones are prohibited, so too are gadgets that receive and transmit over the airwaves, such as portable radios and TVs. And lest we forget, pressurized products (e.g. spray cans) and flammable liquids (e.g. butane found in cigarette lighters) are also frowned upon aloft; spray cans aren't restricted per se, but most airlines ask passengers to pack them in checked luggage instead of carrying them on board.

Speaking of cigarette lighters, travelers can't help noticing that in-flight use of tobacco is fast becoming verboten. Cigars and pipes aren't permitted on domestic or international flights under any circumstances, and cigarette smokers can't light up within the continental United States or on short-range flights abroad. Smoking on some short (less than two-hour) flights is now prohibited even in Europe.



RENTAL CAR CAVEATS IN EASTERN EUROPE

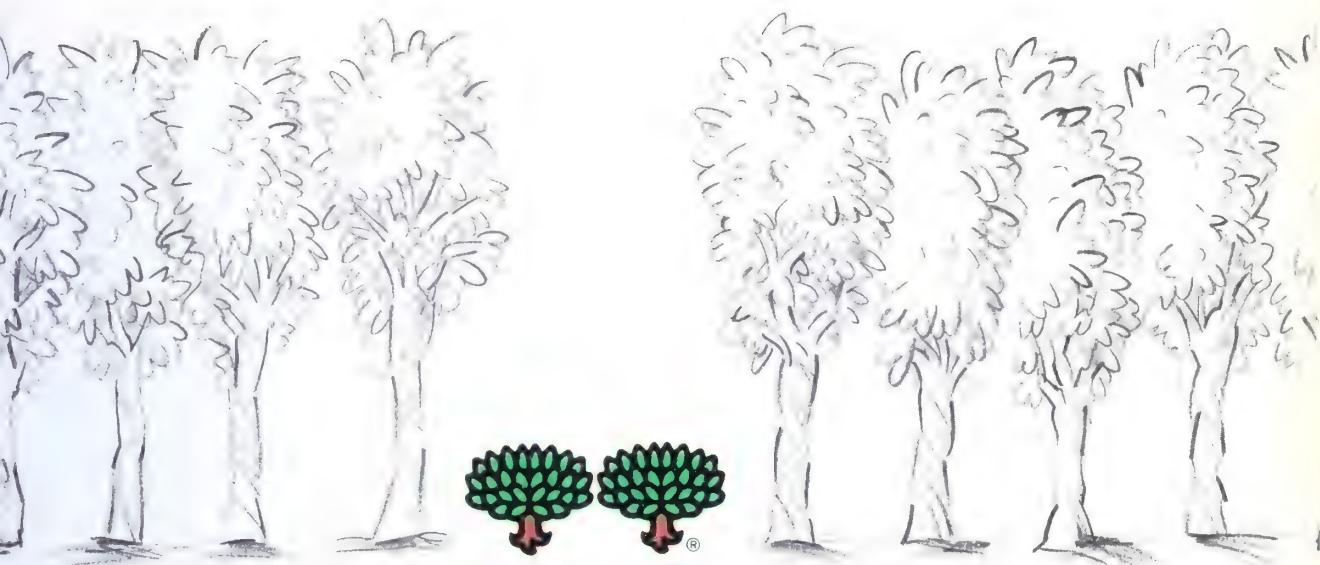
THE FORMER EASTERN BLOC IS RIFE with new outlets for all kinds of goods, not the least of which is a thriving market for stolen cars. As a result, prospective auto renters in Europe—even those dealing with affiliates or sub-



sidaries of the U.S. majors—have been faced with increasing restrictions on where they can drive.

Currently the least restrictive is Hertz, which permits use of its cars in all European countries except Yugoslavia. Avis does not allow vehicles rented in Western Europe to be driven *anywhere* across the former iron curtain (except eastern Germany), nor may clients take cars rented in most Eastern European countries to another. Thus an Avis car rented in Berlin may not be driven into Czechoslovakia, and one rented in Prague may be driven to Western Europe but not to Romania or Poland. (The exception is free movement between Czechoslovakia and Hungary.)

Europcar, an affiliate of U.S.-based National, does allow more or less free movement of its vehicles throughout the east, but warns that renters will be financially liable in case of auto theft in certain countries. The rules vary somewhat at each branch; the Prague office may make the client liable for cars driven to Poland, Romania, or countries of the former Soviet Union, but not to Hungary or Yugoslavia. Anyone making reservations via National's toll-free number should inquire as to the current situation. □



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Commentary/by Christina Del Valle

CLEANING UP HUD: IT ISN'T OVER YET

Housing Secretary Jack F. Kemp is a tireless advocate of self-help programs. But some folks are taking his sermons too literally. Detroit city officials, for example, investigators at the Housing & Urban Development Dept. say the city improperly diverted \$1.2 million in anti-poverty grants to bankroll salaries of principal workers on unrelated projects and to buy cars for City Hall. Detroit officials are disputing the finding.

Detroit isn't alone. At a Mar. 18 hearing, the House Government Operations subcommittee on housing produced evidence that from Troy, N.Y., to Los Angeles are improperly spending millions of dollars from the \$3.2 billion Community Development Grant program into ineligible projects (table). The system misuses the program "in order to detect and deter misuse of CDBG funds," says Chairman Tom Lantos (Calif.) declared at the hearing.

Not enough. But Congress must shoulder some blame, too. Lawmakers have repeatedly ignored pleas for legislation that spell out precisely what kinds of programs cities can fund with antipoverty dollars. Such a measure is needed "so that corrupt city officials can't use community development funds as a slush fund," says HUD Deputy Secretary Alfred A. DelliBovi.

\$1.2 BILLIONS. Reforms to ensure that block grant money is spent properly are particularly important now. Congress is considering boosting annual funding for the program by \$10 billion. But better oversight and guidance in the infusion of such vast sums may pave the way for more HUD success. Even if spending remains flat, as President Bush proposed in his fiscal 1993 budget, it's still imperative that the money be well targeted.

Who could oppose such change? Not HUD, for one—they're squealing

like stuck porkers. The current law provides only vague spending guidance, allowing cities to finance everything from "a suitable living environment for all persons" to historic preservation to "the conservation of the nation's scarce energy resources." HUD's guidelines don't add much. They require grants to be used for programs to benefit low- and moderate-income people, help prevent or eliminate slums or blight, or meet other "urgent community development needs."

City officials contend that such broad latitude makes sense because

territorial rights from a rival, something is seriously wrong. Even if, as Troy officials say, such spending creates new jobs, that isn't the kind of project the law should finance.

The problem cries out for new legislation. Congress can build on the existing grant-allocation criteria, which consider such factors as poverty and overcrowded housing, but it must narrow the law's definitions to ensure that eligible programs combat those ills. And it should amend CDBG's cumbersome administration process. Right now, HUD checks the program with scattershot audits, and virtually every adverse finding is appealed. The new law could also limit appeals, perhaps by disallowing small claims. "Have a law to make [appeals] the exception rather than the rule," asserts Christopher Greer, assistant inspector general for audit. Or the law could forbid all appeals, as it does in other HUD programs.

PROVEN RECORD. In return, HUD must also adapt. It should step up CDBG oversight, increase enforcement, and withhold funds where it finds repeated abuses. HUD may also need to boost staff levels in its local offices, which were cut significantly during the Reagan-Bush years. "There is a measure of luck when we find things," concedes Dale L. Chouteau, regional inspector general for audit in

HUD's Chicago office.

During the 1980s, poverty rolls swelled, and the gap between rich and poor widened, making urban-development expenditures even more critical. The block grant program is a good one with a proven record: Its funds are too precious to be squandered on projects that don't directly help the poor.

The message is clear. Kemp needs to spend less time proselytizing on conservative causes and more on HUD's books. As for Congress, instead of splashy hearings, how about some judicious legislation to squeeze the pork out of the block grant program?

FUNDING A WEALTH OF ABUSES



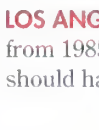
DELAWARE COUNTY, PA. Officials spent \$5.6 million from 1984 to 1989 on ads, travel, and salaries of employees working in ineligible programs. The county also made low-interest loans to companies with links to local officials



TROY, N.Y. The city lent \$1 million in 1990 to a local hockey team, the Islanders, to buy territorial rights from a team in a nearby town. Though the team repaid Troy after a HUD probe, Troy in 1991 lent \$650,000 in grant money to cover the team's expenses



MIAMI Officials in 1988 lent \$5.4 million, at 1% interest, to a Saudi with ties to the rogue bank BCCI. Investigators are studying whether Sheik Amin Jamil al-Dahlawi's use of the proceeds to renovate a onetime immigrant-processing center met grant guidelines



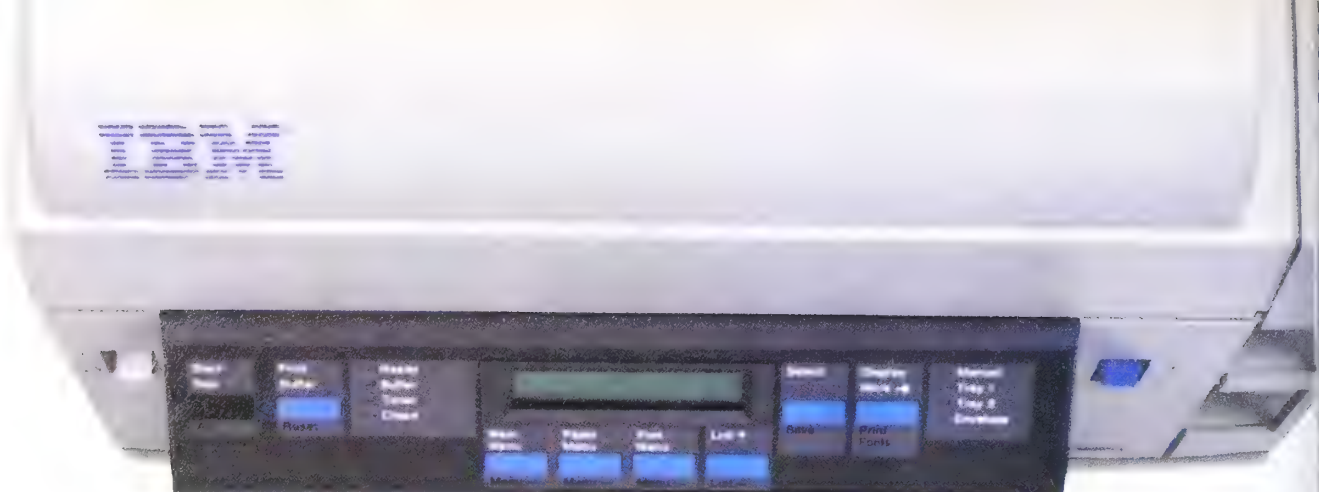
LOS ANGELES Housing officials spent \$4.3 million from 1985 to 1991 for local police services that should have been funded locally

DATA: HOUSING & URBAN DEVELOPMENT DEPT., BW



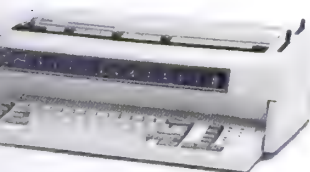
they're closer to the problems than bureaucrats in Washington. HUD investigators and critics on Capitol Hill, the block grants' proponents contend, are painting an unfair picture of a program that has worked well for nearly two decades. "Unfortunately, [Lantos] has decided to talk about abuses that are less than 1% of the whole CDBG program," complains Tom Cochran, executive director of the U.S. Conference of Mayors. "Let's not be misled to think this is widespread."

But when city officials fork over \$1 million in antipoverty funds to a minor league hockey team so that it can buy



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WILL NISSAN GET IT RIGHT THIS TIME?

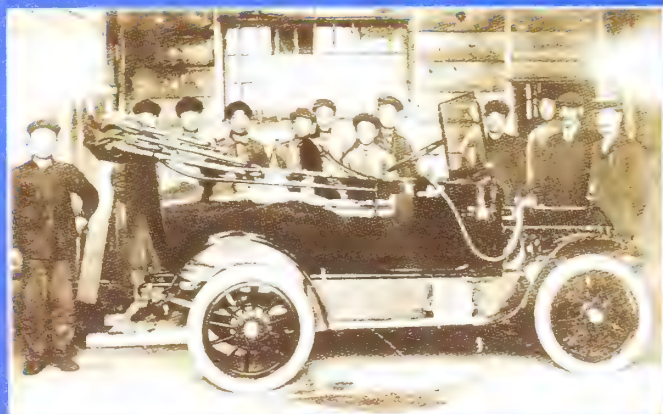
After a decade of trouble, the carmaker is making major changes

It is a rainy Sunday afternoon in suburban Tokyo, and 82-year-old Yutaka Katayama is engaging in one of his favorite pastimes: talking about Nissan Motor Co. Katayama, the man who dragged Nissan into the U.S. and made the Datsun brand a household name in the 1960s, has not worked for the carmaker since he was muscled out as head of its American unit in 1977. But he keeps extremely close tabs on his former employer, poring over everything written about it and showing up in the audi-

greatness. With the sporty Datsun 240Z defining it as Japan's most exciting carmaker, Nissan surged past Volkswagen in 1975 as the No. 1 importer to the U.S. But then Nissan lost its traction. From 1980 to 1991, its U.S. market share slid from 5.5% to 4.7%—at a time when Japan's overall share grew from 17.7% to 28.5%. In the year ended Mar. 31, Nissan expects pretax profits to have dropped 50%, to a paltry \$615 million, on revenues of \$33 billion.

ily sedans and minivans. And do the Japanese carefully nurture their brand names, building their aura slowly and steadily for the long term? Not Nissan. Starting with a misguided name change in 1981, a series of marketing missteps and lurching shifts in positioning have left it without a consistent image.

PRODUCTIVITY LAG. And you say the Japanese home in on export markets with fierce concentration? That they're superefficient manufacturers? That their collaborative style makes for friction-free management and pacific labor relations? Not Nissan. It hasn't



THE NISSAN STORY

▲ **1911** Kaishinsha Automobile Factory opens its doors in Tokyo

▲ **1914** Kaishinsha produces its first car, the Datsun

▲ **1958** The company, by now renamed Nissan Motor Co., begins exporting the Bluebird to the U.S.



▲ **1968** Datsun 510, designed for the U.S. market, is introduced



▲ **1969** Datsun 240Z zooms onto the scene

ence whenever a new product is introduced. Today, relaxing amid a collection of American memorabilia in his Western-style home, he does nothing to hide his disappointment with Nissan. "They've got to whip up the energy again," Katayama urges. "Nissan has lost its spirit."

It has lost a lot more than that. Fifteen years ago, Nissan was poised for

For those who think Japan's carmakers can do no wrong, Nissan's problems will come as a shock. The Japanese are acute judges of ever-shifting consumer demands, right? Not Nissan: It hasn't listened carefully to its customers, missing changes in their needs and failing to produce products for vital market segments such as fam-

ough attention to its most important market, the U.S., where a dealer network has hurt sales. Quality remains on a par with the rest of its peers, Nissan's productivity and its costs are high. Having abandoned the vaunted Japanese cost-management approach, it has created distracting internal power struggles and labor clashes.

Global auto slump is hurting even Nissan. Of course. Even mighty Toyota Corp. may post a 30% drop in profits in the year ended Mar. 31. Nissan, with high production costs and a host of expensive global investments, is especially vulnerable.

With its profits now skimpy, Nissan

must scratch to come up with the funds it needs to keep investing in technology, new products, and improved marketing. To avoid falling permanently behind its better-heeled archrival, Toyota, Japan's No. 2 auto maker is now furiously trying to dig itself out of a hole.

NEW SEDAN. Nissan has begun to whip dealers into shape in the key American market with a top-to-bottom reorganization of its U.S. sales and marketing unit. It is also betting heavily on new products. Chief among them is the Altima, a new sedan that will probably sell for around \$14,000, to compete with Honda Motor Co.'s Accord and Toyota's Camry. With the Altima, Nissan is finally staking a claim in the important family-sedan segment. Due to replace the aging Stanza this fall, the new model was drawn up in Nissan's San Diego design center and will be manufactured in Tennessee.

The San Diego center, headed by former General Motors Corp. designer Gerald P. Hirshberg, designed two other important new vehicles for Nissan. The J30, a \$33,000 luxury sedan, hit the company's Infiniti showrooms last

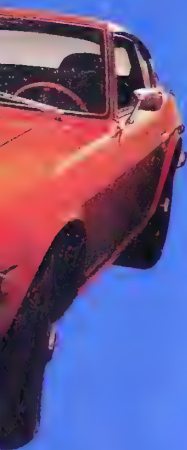
Nissan hopes to shake things up with a switch at the top as well. Kume, 70, is stepping up to chairman in June, halfway through his fourth two-year term as president. He will hand the wheel over to Yoshifumi Tsuji, 64, executive vice-president for production operations (page 85). Tsuji's mission: a radical cost-cutting program to brighten Nissan's bleak financial picture and boost productivity by 10% annually for three years.

When it comes to the U.S., Nissan finally seems to be waking up. In a tacit acknowledgment of its shaky performance in the U.S., Kume for the first time dispatched two directors from Nissan's 46-man board to the States last year. An expansion of its Tennessee plant will give Nissan more than enough U.S. capacity. And the three U.S.-designed vehicles demonstrate that headquarters is listening to American product planners at last. "Styling will give the Altima an advantage that no Stanza has ever had," says George Peterson, a former Nissan product planner who now heads market researcher AutoPacific Group in Santa Ana, Calif.

The new cars have put Thomas D.

Company passes
as leading
in the U.S.

me changed in
Datsun to
match parent



▲1983 Production begins in Smyrna, Tenn.

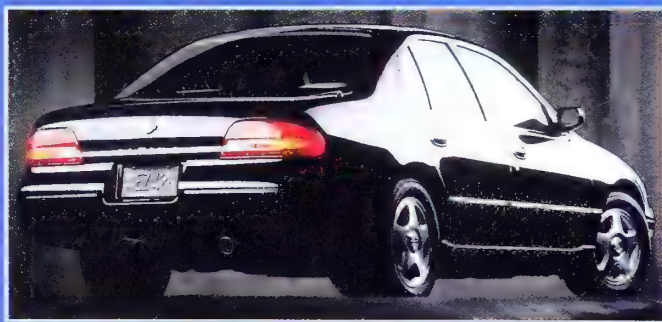
1985 Nissan's U.S. car and truck sales peak at 831,000



▲1989 Infiniti luxury cars make their debut

1991 U.S. car and truck sales slump to 584,000, lowest since 1982

▼1992 New sedan, known as Altima, introduced to U.S.



month. And the new Quest minivan, due this summer, is Nissan's third attempt to crack that lucrative market. "We're still known as a maker of small, cheap cars" in the U.S., concedes President Yutaka Kume. "Our strategy is to go more upscale, to offer more of a family car. We want to change our image."

Mignanelli in an exuberant mood. Nissan's U.S. sales and marketing boss predicts Altima sales will eventually top 150,000, triple those of the Stanza. The new minivan should fill its showrooms with 50,000 customers that Nissan never saw before. More important, switching its emphasis from the cheaper Sentra to the higher-margin cars ought to make Nissan and its dealers considerably more

profitable. "All of a sudden, we'll have gone from 60% low-end, let's-make-a-deal cars to about a third," Mignanelli says.

Yet that doesn't assure Nissan of a turnaround. Some dealers are nervous about the sedans' styling, which features a controversial trunk line that dives sharply toward the ground. Tsuji's cost-cutting plan doesn't come with any guarantees, either. In Japan, Nissan has been trying to get it together since March, 1987, when it launched a similar cost-shaving campaign. "It takes a long time for a supertanker to make a U-turn," warns Kume. "We've only gone about 90 degrees."

For a company still 90 degrees askew, the numbers aren't heartening. With operating results barely in the black, Nissan will have to rely on bank borrowing to keep the factories humming. Next year's figures will look even worse, with depreciation expenses peaking at about \$1.23 billion and auto sales still ailing. Cost cuts, not sales growth, is where profits will come from, notes Steve Usher, auto analyst for Kleinwort Benson International Inc. in Tokyo. "At this point, it's their only choice."

The desperate need to rein in costs must seem pretty foreign to Yutaka Katayama, the man who made Nissan click in America. In 1960, he set out for the U.S. with only a few dollars in his pocket and a gutless box-on-wheels called the Datsun 210. As Nissan's West Coast rep, he would drop off his one-liter buggy with used-car dealers, begging them to sell it. He soon collected a ragtag band of hungry dealers, taught them first-class Japanese service, and paid them well. Sales skyrocketed in 1968, when the 1.6-liter Datsun 510 hit the docks, followed by the jazzy 240Z in 1969.

More than anything, the 1973 oil crisis propelled Nissan to new heights. Its small cars were in place just as frightened Americans abandoned their gas-guzzlers. But it was also the beginning of the end for Katayama, who had long been on shaky ground with Tokyo because of his blunt manner and his un-Japanese habit of taking personal credit for Nissan's U.S. successes. As Tokyo finally began to see growth opportunities in the U.S. market, executives' irritation grew. Lacking any power base, Katayama was recalled to Tokyo in 1977 and retired with little fanfare.

Despite its early promise, Nissan never really paid enough attention to the U.S. By contrast, Honda, a small player

at home, embraced the U.S. market as its own. And Toyota, which had to retreat from the U.S. after its debut in 1958 with a shoddy first product, the Crown, later plowed enough of its ample resources into North America to become the No. 1-selling foreign-car company there. But Nissan lacked the finances and the commitment to go all out.

SIGN LANGUAGE. Nissan's lost decade dawned in 1981. To consolidate the company's brands worldwide, a headquarters edict jettisoned the high-profile Datsun brand from the U.S. market in favor of the corporate moniker. The changeover dragged on for five years, as frustrated dealers stonewalled the change by refusing to pay for new

terribly well laid out, the Smyrna factory was far more expensive as well. Its capacity of 240,000 vehicles, Nissan paid \$745 million. Honda shelled out two-thirds of that for 50% more capacity.

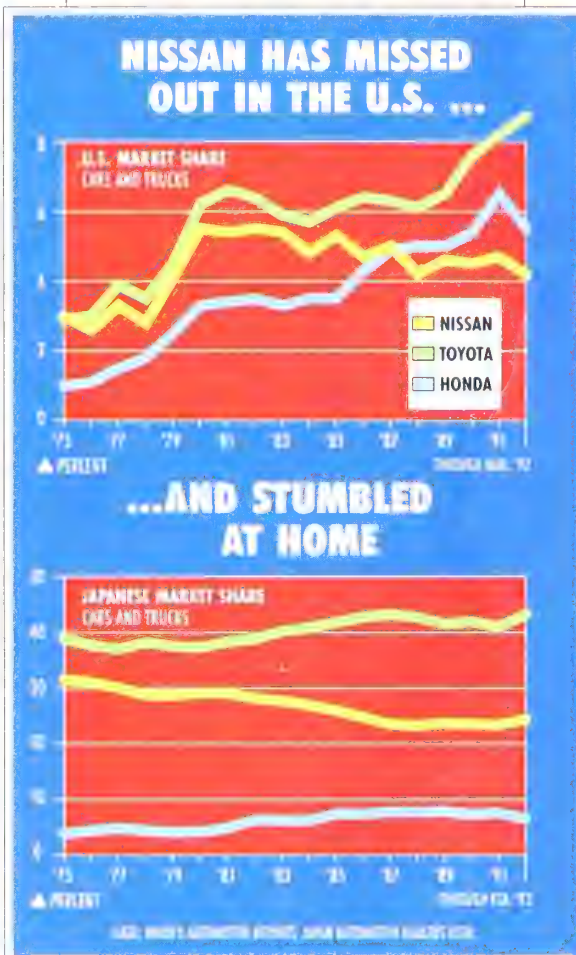
By the time Nissan's first light-bee, the Sentra, rolled off the line in March, 1985, Honda was already producing 117,000 cars annually in the U.S. Worse, although Nissan's U.S. sales peaked at 831,000 that year, its two cheapest models accounted for 57% of the volume. Instead of moving into larger, more profitable family sedans, as Honda did later Toyota did, Nissan stuck to making its entry-level pickup and Sentra.

Because Nissan had so little trouble selling to Americans in the early '80s, it began to neglect Katayama's easy refrain: "Mr. Dealer, you are our most important customer." In 1981, when the U.S. and Japan agreed to limit Japan's yearly car exports to the U.S. to 1.68 million units, the artificial shortage swelled profits for Japanese manufacturers. Toyota wisely allocated scarce cars as an incentive to get dealers to upgrade service facilities or relocate to a better neighborhood. It also invested in its U.S. sales organization, building it to the point where it's no larger than Ford Motor Co.'s or Chrysler Corp.'s. Nissan instead invested its funds in its Japanese dealers, many of which were floundering as Nissan's market share fell.

WEEDY GARDEN. Still angry over the name change, Nissan's American dealers resisted its attempts to cajole them into improving their dealerships. Unlike Toyota, Nissan didn't weed out poorly performing mom-and-pop lots—where big companies got their start—in favor of professionally managed megadealers. "Nissan drifted into the 1980s before it started actively managing its dealers," says J. Jesse Snyder, director of technology and planning for market researcher AutoFacts Inc.

To make matters worse, when the numbers headed south, Nissan was stuck with too many dealers for dwindling sales. While it has nearly as many dealers as Toyota, it now sells about half the cars, and they're entry-level vehicles with smaller margins to boot. Gripes one dealer, a member of Nissan's Dealer Advisory Council: "You're competing head-to-head with a Toyota dealer across the street, you can't make it."

The legacy of Nissan's dealership woes shows up in J.D. Power & Associates' annual survey of customer



signs. Once drawn to Datsun for performance and sportiness, customers became confused. Many thought Nissan was a Toyota subsidiary. "Unfortunately, the Nissan name is still weak," Kume concedes.

Although Nissan grabbed headlines in 1980 as the first Japanese auto maker with plans to build a U.S. factory, it has been dragging its feet ever since. When the Smyrna (Tenn.) plant finally opened in 1983, it was a year behind Honda's Marysville (Ohio) plant. Huge and not

THE OLD FACTORY HAND WHO'S TAKING THE WHEEL

Yoshifumi Tsuji will never forget that glorious day last July at the foot of Mount Fuji. It was an annual golf tournament for some dozen top Japanese auto executives. Tsuji, executive vice-president of Nissan Motor Corp., shot his first hole-in-one and won the event with a score of 18. Close behind in second place: Masamichi Toyoda, executive vice-president of archrival Toyota Motor Corp. To succeed him, Tsuji must try to beat Toyota's showroom—a tougher task. Nissan's president Yutaka Kume has picked Tsuji to succeed him in June, just as Nissan takes over Japan's No. 2 carmaker. The industry is in a state of flux. "We've got to throw our weight into making competitive products while cutting waste," says Tsuji. "It's an extremely difficult problem." Tsuji, 64, seems fit to tackle it. Like many, he's an engineer. He also has a lot of experience on the shop floor, the prime target of Nissan's round efforts. Most of Tsuji's career has been spent in or near the factory, specializing in production control, engineering, and product planning. "Given Nissan's problems, he's the best man for the job," says Norio Yoshida, president of Automotive Business Practice Institute, a consultancy in Tokyo.

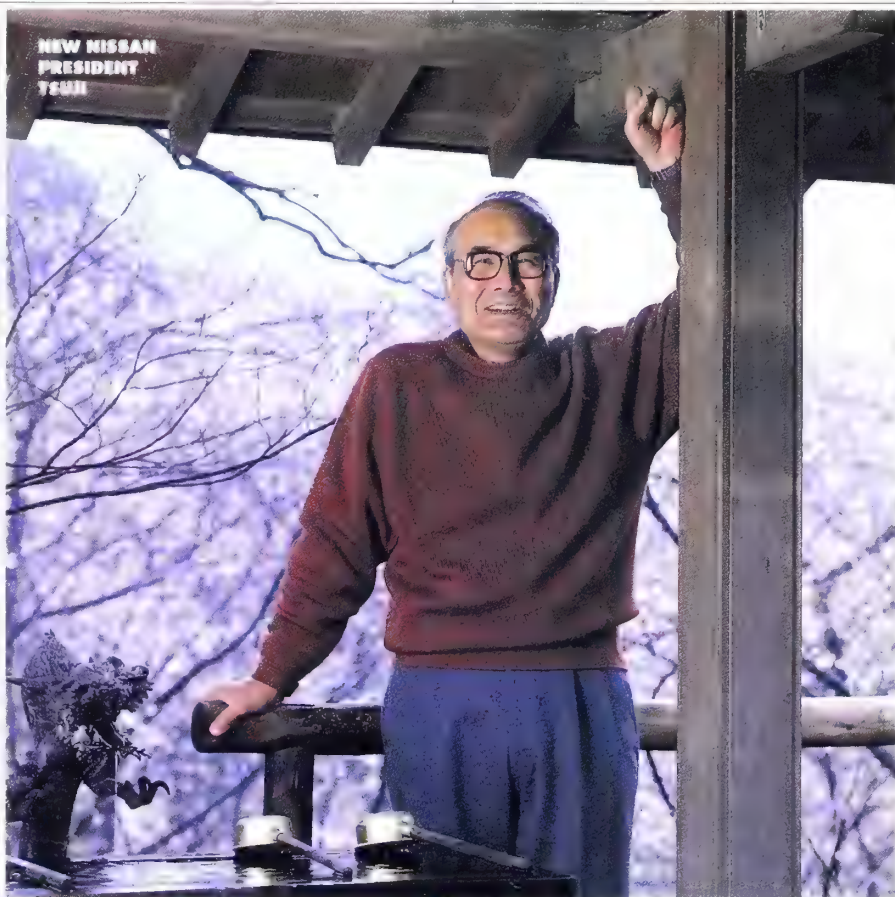
Tsuji's executive entrusted with Nissan's future joined the company practically by accident. The youngest of five children whose parents ran a traditional Japanese inn on the southern coast of Shikoku, Tsuji attended an agricultural high school and dreamed of becoming a medical doctor. A bout with tuberculosis set him back, and after failing the entrance exam for medicine at the top-ranked University of Tokyo three years running, he took the engineering exam and passed. He concentrated mainly on optical equipment, but at graduation he wanted to build something that moves," he recalls. He was the first carmaker to accept his application.

FINGERNAILS. Tsuji's thoroughness combined with a warm, casual manner, earned him quite a following at the factories. Subordinates describe him as frank, fair, and a good listener. Line workers wave to him as he walks across the floor, and he's not afraid to stop and get his fingernails dirty checking out the equipment. He's quick with a grin—so, even in heated debates among engineers, he can say: "You idiot!" without mak-

ing you angry," says Kouichiro Tohda, manager of Nissan's Tochigi plant, who worked under Tsuji when he held that same post.

Tsuji lives with his wife, Miyako, in a house that borders a quiet, tree-lined stream in suburban Tokyo. They have no children. Golf dominates his weekends, and he keeps close tabs on the

of experience outside the factory walls. "He's a great engineer, but can he run a business?" asks one union official at Nissan. Others wonder if he's too nice a guy to take full command. But Tsuji dismisses such concerns, planning to create firm guidelines while delegating the functions he's shaky on, such as sales, to those who know best. "That's



TSUJI IS QUICK WITH A GRIN—SO EVEN IN HEATED DEBATES, 'HE CAN SAY "YOU IDIOT!" WITHOUT MAKING YOU ANGRY,' SAYS A TOP NISSAN MANAGER

Nissan corporate soccer team on TV. Other than that, "eating is what I do best," he jokes over lunch—and reaches for another helping of fried noodles. Although he has never been posted overseas, Tsuji studies English with a tutor, mostly to help avoid social gaffes.

Some critics fret about Tsuji's lack

of what good vice-presidents are for," he says.

To get him ready, Tsuji's handlers are coaching him in the nitty-gritty of his new job. They have drafted a Nissan crib sheet to help during interviews and have bought him a pair of lensless glasses for facing popping flashbulbs. Occasionally, Tsuji feels a bit overwhelmed by the scope of his new tasks. "It takes time for me to gather my energy," he confesses. "My emotions go down first, then up. But I'm told I shouldn't say that." Luckily, he gets two months to regroup and think through his plans for Nissan's future. But once June rolls around, he'll need to move fast: The last thing Nissan needs now is a dawdler.

By Karen Lowry Miller in Tokyo

The Corporation

ciates Inc.'s sales satisfaction index, which polls car buyers about how well they liked their dealers' sales and delivery process. Nissan is below average, while Toyota and Honda consistently rank among the top of the pack. Another key indicator: Last year, only 20% of Nissan dealers rated the company's franchise as an excellent financial investment, compared with 67% of Toyota dealers and 73% of Honda dealers.

SLOW START. One reason for Nissan dealers' disgruntlement is the gaping hole in the carmaker's product lineup. When Honda and Toyota raced into the burgeoning family-sedan segment, offering Accords and Camrys to aging, less fuel-conscious Americans who were trading in their tinier Civics and Corollas, Nissan never heard the starting gun.

Worse, the yen had shot up in 1985, making imports to the U.S. more expensive and less profitable. Nissan's U.S. profits dried up overnight, creating an operating loss at the parent company in fiscal 1986. Stuck with tired old models, Kazutoshi Hagiwara, president of the U.S. business from 1986 to 1990, concentrated on revamping the distribution system. He also hired former Ford sales executive Mignanelli to help clean up and eventually take over. "Maybe I did not harvest enough," concedes Hagiwara, now president of a Nissan car-electronics subsidiary. "But the right seeds were planted for the future."

Mostly, though, Nissan sowed confusion in the U.S. marketplace. Ever since the name change, Nissan's image has been a moving target. Mignanelli immediately fired the ad agency that had replaced the venerable "Datsun—We Are Driven" campaigns with the relatively insipid "The Name is Nissan." He hired the hot Los Angeles shop Chiat/Day/Mojo Inc. to come up with a new visage. Chiat/Day delivered the 1987 "Built for the Human Race" campaign, featuring a group of yuppie engineers sitting around discussing why people buy cars. *Adweek* promptly dubbed them the year's worst ads.

What followed were ads portraying Nissan as a company that builds performance cars. While Datsun had earned



THE NEW CARS HAVE PUT THOMAS MIGNANELLI IN AN EXUBERANT MOOD. THE U.S. SALES AND MARKETING BOSS PREDICTS ALTIMA SALES WILL EVENTUALLY TOP 150,000, TRIPLE THOSE OF THE STANZA

a performance image with its Z-car, that image didn't survive the name change. And some critics question whether a sporty aura is appropriate for a full-line, mainstream carmaker. Says AutoFacts' Snyder: "There are not that many enthusiasts out there, and Mazda is doing a good job of reaching them."

Nissan agrees, and it has ordered Chiat/Day to move it back into the mainstream with ads that stress durability, quality, and reliability—just like Toyota and Honda. In its latest TV ads, the upscale Nissan Maxima now sits sedately behind a showroom window, reveling in its safety and luxury features, instead of racing to get the boss to the boardroom on time. The jury is still out among dealers. "Nissan needs to get something that works and

stick with it," says R. E. Cochran, executive vice-president of No. 1 Cochran Inc., Butler (Pa.) dealer.

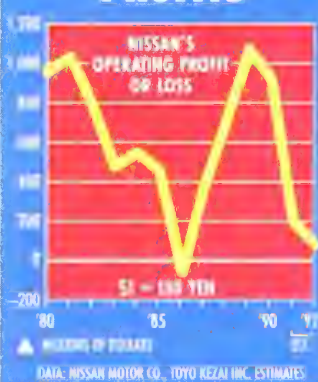
The image of Nissan's luxury Infiniti brand has been in flux ever since its 1989 launch, but with ads that showed rocks in trees, but no cars. It has always trailed Toyota's Lexus brand, which launched a few months earlier. Last year, it aggressively adopted three new models. Lexus sped past it, and Mercedes-Benz sold 71,206 cars. Infiniti sold just 34,890. The U.S.-designed Infiniti J30 should help: It has traditional luxury cues such as a grille and interior wood accents that Japanese des-

igners left off the flagship Q45 model. Next year, they'll be added to a restyled Q45.

Much of the blame for Nissan's sagging in the U.S. can be placed on the home office. At the time, Katayama towed it into the American market, Nissan was being run by a conservative former banker named Katayama, who surrounded himself with yes-men and drew ridicule by putting up a bust of himself in one of the factories. From 1977 to 1985, former accountant Takashi Ishihara presided. Ishihara's domineering style contributed to some distracting clashes with Nissan's hostile Japanese unions. Creative energy often got smothered as well. Instead of choosing one prototype over another, Ishihara's men would haggle, essentially redesigning by committee and squeezing out all originality.

SEXY CURVES. Kure, the engineer who took over in 1985, did his best to forge consensus and loosen up what had become a stuffy, faction-riddled bureaucracy. Most important, he made one engineer solely responsible for each car, and he O.K.'d the sexier curves and riskier designs that have given Nissan one of the industry's stronger current portfolios. Yet costs remain high, and inept marketing has

ROLLER-COASTER PROFITS



ume is relinquishing the CEO position to accept a coveted post in an elite organization but only after installing his hand-picked successor to lead Nissan's turnaround.

It makes sense to have an engineering Nissan, especially one well versed in production control, the news of which choice took many by surprise. The main contender was thought to be Masamichi Hanawa, 58, executive vice president for international business. "Many people lost a lot of money," confesses one insider, who says the few who stayed with Tsuji in the headquarters pools shared at least \$4,000.

Tsuji's challenge is arguably greatest in the U.S. The company has just invested \$100 million to double capacity at its plant in Smyrna, Ga., to 450,000. Sales of the new Altima must hit 100,000 fast for the company to operate profitably, yet for the past few years, Nissan has sold an average of only 50,000 a year of the Stanza it replaced. Another bad omen: Sales of the Altima in Japan last fall, haven't been as strong as hoped. From January to March, sales fell 8.9%. And the U.S. rollbacks at a time when loyalties to the brand remain weak. In the first quarter, Toyota's sales were up 13.6%, while Nissan gained only a fraction of a percent, selling 120,000 vehicles.

Mignanelli thinks he has the answer: He has the authority for decisions to the point that two years ago he brought in Boston Consulting Group Inc. to help. Start with a pilot program in Dallas, he says, to take the post of dealer-operations manager (DOM)—someone to live out in the communities as an adviser to a small number of dealers. "He's the only Nissan person who walks in the dealer's door," Mignanelli says. The DOM is there to help dealers decrease their fixed costs, improve customer satisfaction, and develop their own local ads, for example.

By last summer, Mignanelli says the plan was working. In October, he announced that Nissan would close 10 of its 11 regional offices and roll out the organization out to the remaining offices. Mignanelli was a long way from home. In January, he reorganized the dealers' staff along brand manager lines. He moved the Procter & Gamble Co., instead of the traditional lines. The idea: concentrating marketing responsibility on each model under one person. On Mar. 26, the final day of the move, after moving more than 50 employees out of headquarters to regional offices, he cut another 60 employees from the home office in Carlsbad, Calif.

In Japan, Tsuji slashes expenses as he describes his plan to get Nissan back on track: Cut the number of variations per

model, slow down the model-change cycle to spread out development costs, and standardize as many parts as possible. "Why does Japan need 20 kinds of steering wheels? Let's be like the Germans and offer two," he says. On average, a Nissan car will share 40% of its parts with another model. Tsuji is aiming to raise that to 55% in the near term. He also needs to cut 1,000 people, or 2% of the line workers, per year for the next three years. And 500 temporaries, hired in the boom times of the late 1980s, will be laid off per year.

Tsuji's rationalization efforts will cut costs by \$770 million a year by the second or third year of the program, executives say. If not, profits will continue to fall, withholding precious funds from technological development. "That means falling behind in the race," warns Neal Doying, auto analyst for Baring Securities (Japan) Ltd.

TASTING TRIUMPH. Nissan's bleak decade offers little reason to expect that the carmaker can speed to the forefront this time around. But there are places where Nissan has tasted triumph recently. One bright spot is Western Europe, where it got in early and managed to keep its finger on the consumer's pulse. Nissan was the first Japanese carmaker to open a plant in Britain in 1986.

Its initial car for Europe was a boxy, uninspiring sedan called the Bluebird—unrelated to the Bluebird back in Japan. When sales fizzed, Nissan quickly regrouped and rolled out the highly popular Primera sedan, sold in the U.S. as the Infiniti G20. Today, Nissan is the Japanese leader in European passenger



DESIGNING MAN: HIRSHBERG'S TEAM CREATED THE NEW J30

cars, with 3.3% of the market, or 29% of the Japanese share, followed by Toyota with 2.7%, according to DRI/McGraw-Hill. Nissan's plant in Sunderland, England, assembled 124,000 Primers last year and will double capacity to 300,000 this summer to make the Micra minicar, while Toyota and Honda won't open their first British car plants until later this year.

Now, Nissan hopes to score a similar feat in its most important overseas market. Mignanelli won't know for sure if his grass-roots plan works until the Altima glistens in showrooms. But executives make no secret of their ambition to leapfrog the Toyota Camry and to displace the Honda Accord as America's favorite car. "We're No. 3 in the U.S., but we're going to challenge No. 1," insists Koichiro Kawamura, chief engineer for the Altima in Japan. That may be asking too much, at least for the short term. But after a decade of disappointments and failures, at least Nissan is finally displaying some fighting spirit.

By Karen Lowry Miller in Tokyo and Larry Armstrong in Los Angeles, with James B. Treece in Detroit, and bureau reports



THE INFINITI J30: A \$33,000 LUXURY SEDAN FOR THE U.S.

AMERICA'S CUP: TECHNOLOGY IS THE REAL PRIZE

Hundreds of companies benefit from the racing teams' innovations

They have become as much a part of the America's Cup crews as the helmsmen and grinders who work the boats. Sitting at banks of computers on converted oil tenders that follow behind the racing sloops, a team of "ETs"—data analysts—keeps tabs on a constant stream of electronic transmissions. Data wired from sensors implanted in hulls and rigging measure speed, wind velocity, and sail shape as the 74-foot America's Cup yachts cut across the racecourse. Not long after the boats have tied up at dock, reams of data are on the way to engineers at Massachusetts Institute of Technology, the Mazda Motor Corp. design center in Tokyo, and elsewhere throughout the world.

And you thought the America's Cup races off the coast of San Diego were just about racing skill and national pride? "It's about technology and money," says three-time winner Dennis Conner. And as competitors from Italy, France, New Zealand, and the U.S. sail toward the May 9 start of the America's Cup races, there has been plenty of both. Spending as much as \$60 million a team—compared with a top budget of a mere \$5 million just nine years ago—the competition has come to resemble the space race.

LIQUID CRYSTAL. Scores of races will be run before the winner of the ornate silver cup is decided. But it's already clear that the victor will share bragging rights with the hundreds of companies that make up the \$1.5 billion sailboat business. The industry, for its part, gets to use the races as its research and development testbed. "The boating industry gets 10 years of research accomplished in 18 months," says Tom McLaughlin, sales manager at North Sails East, which has so far supplied nearly \$2 million worth of synthetic sails to America's Cup, one of two competing American teams.

As the 141-year-old Cup competition

has increased in intensity, so too has the search for new technologies that will give competitors an edge. The improved sail design used by Il Moro di Venezia, the Italian challenger, uses patches of liquid-crystal material developed by Montedison, the Italian chemical company. The liquid crystal, a plastic-wrap-like

test the Mazda Miata. The carbon-fiber composite material used in the hulls of all competitors was first developed by the U.S. aerospace industry.

The innovations eventually will find their way to the boats piloted by weekend sailors around the world. Yamaha Corp. plans to use what it learns from sponsoring Japan's Nippon Challenge to launch a new line of sailboats. Italian industrialist Raul Gardini intends to do the same with data he will gather from the Italian boat he's underwriting. Already, Du Pont's Kevlar, first used in the 1983 America's Cup races, is now used by most sailmakers. Onboard computers that are used to pinpoint wind direction have migrated from the competition to pleasure craft. Coming soon: Carbon-fiber masts, spars, and fittings

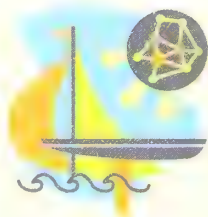
promise to lighten pleasure craft to the point where keels can be made lighter and shorter, enabling large boats to sail safely in shallow waters.

OVERKILL. The technological innovations don't stop there. A group of Japanese companies contributed \$15 million worth of knowledge and materials to their national entry. Likewise, a consortium of U.S. companies, including Boeing Co. and Cray Research Inc., have supplied the team with American teams with millions of dollars worth of wind-tunnel testing and computer time. Science Applications International Corp., a San Diego defense contractor, has also provided software and computer-modeling expertise to the American teams in return for data it hopes will help improve designs for submarines and barges. "There's a lot of commonality between the America's Cup and what could be useful in commercial shipping and the Navy," says SAI ship designer Karl Kirkman.

But deep pockets and newfangled technology can't ensure success. "It's still the keen eye of the sailor who looks up the course and makes his decision by the way the wind looks on the water and how the birds are flying, that wins the race," says McLaughlin. Conner, with less money but more sailing smarts than his competitors, is staging a comeback. And the futuristic Japanese boat faded after a strong start. The problem: cutting-edge gear that got pushed past its limits. In recent days, when winds picked up and seas got rough, both a composite rudder and carbon-fiber boom snapped.

By Eric Schine in San Diego

SO LONG, WOOD AND CANVAS



MATERIALS Hulls now consist of superstrong, lightweight carbon strands and resin, surrounding a waxy cardboard called Nomex. The end result is far stronger and lighter than fiberglass. Kevlar sails are now standard, but America's Cup sails also contain liquid-crystal strands that give the sail more strength in heavy winds.

Each set of sails costs nearly \$100,000

COMPUTERS AND ELECTRONICS

Microcameras and computers analyze sail and mast shape and compare them to optimal shapes for existing wind conditions. Another computer linked to navigational satellites simulates a bird's-eye view of the race course. The competition's boat is positioned on the screen by shooting a laser gun. The beam enables the computer to calculate the competition's distance and speed instantly

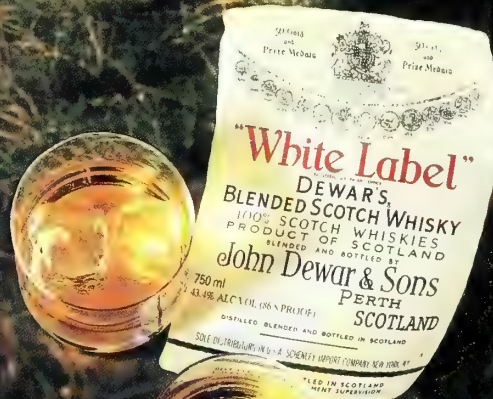


DATA: BW

film derived from polypropylene and laminated onto carbon-fiber strands, permits the sail more strength in heavy winds while retaining the flexibility it needs in lighter conditions. The hull of the recently eliminated Japanese boat was perfected using wind tunnels and computer analysis techniques used to

'The boating industry gets 10 years of research accomplished in 18 months'

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DEWAR'S SCOTLAND

A THINK TANK FOR, ER, 'COMPETITIVENESS'

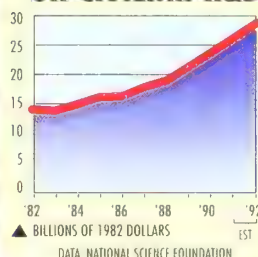
Washington's mandate: Analyze, but steer clear of industrial policy

It wasn't just hubris that made Ian Ross think the Reagan and Bush Administrations might want to discuss U.S. competitiveness with him. As president of AT&T Bell Laboratories, Ross had an unmatched view of U.S. industry's technological prowess and problems. And his Japanese counterparts regularly powwow with their Ministry of International Trade & Industry (MITI). Yet dur-

ing Ross's recently ended 12-year tenure at Bell Labs, "no one in the Administration ever called me up," he says. To Ross and many others, this gulf between corporate researchers and the government is a key reason for America's increasing vulnerability in high tech. Uncle Sam doles out more than \$30 billion in nondefense research and development money each year, much of it aimed at making scientific and technological leaps. Yet spending decisions are largely made without consulting the industry leaders who are struggling to turn advances into products. The result, argues Senator Jeff Bingaman (D-N.M.), is a sadly small bang for the federal buck. "We need to make better connections between the federal research enterprise and the industrial sector," he says.



FEDERAL SPENDING ON CIVILIAN R&D



CTI WILL PLAN WAYS TO REGAIN THE LEAD IN MACHINE TOOLS

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Now, a new federally funded policy group called the Critical Technologies Institute may offer a way to connect. Scheduled to start up this month with a \$7.6 million two-year budget, the insti-

tute will provide the Administration with detailed strategies for boosting U.S. competitiveness in everything from high-tech materials to machine tools. If it works—a giant if—the institute will give business a crucial voice in federal R&D decisions. "Business thinks this is vitally important," says Daniel F. Burton Jr., executive vice-president of the industry-led Council on Competitiveness.

The institute is evidence of a new step in the Bush Administration's delicate R&D dance. From the start, top White House officials such as Budget Director Richard G. Darman and former Chief of Staff John H. Sununu vehemently opposed "industrial policy"—picking winners and losers among companies, industries, or technologies. **GENERIC R&D.** But others in the Administration advocated stronger support for commercially important research. They argued that Washington should bankroll what they began calling "precompetitive" or "generic" technologies that cut across many industries. There's a slim difference between this and industrial policy, and the new terminology was "an artifice to keep us from being destroyed," recalls Thomas J. Murrin, a former Deputy Commerce Secretary. The strategy worked. In its 1992 budget, the Bush Administration added \$149 million for an initiative in generic high-performance computing.

Still, the Administration recoiled from anointing other technologies. It added disclaimers when the Commerce Department and White House science adviser D. Alan Bromley issued reports listing key areas such as ceramics and molecular biology. And after Bingaman pushed legislation through Congress creating the Critical Technologies Institute, the White House nixed the idea last summer. "There was a philosophical difference," says Eugene Wong, associate director for industrial technology in the White House science office. "The thought funding should be based on a general need" rather than other criteria.

Bingaman persisted, however. In meetings last fall, he convinced Darman and other officials the institute wasn't a Trojan horse for industrial policy. The White House reversed itself and tossed in an extra \$1 million for the 1993 budget.

"There's been a change in policy," insists Robert M. White, Commerce Under Secretary for technology. "But the Administration recognizes that it has to move more and is looking for ways within its ideological boundaries."

HONING THE EDGE. In the future, the Critical Technologies Institute will provide a new depth of analysis for government. Its first task, for example, is producing a report on machine tools. U.S. companies invented computer-controlled machine tools, but only 30% of small American manufacturers use them, vs. 70% of Japanese companies. At the same time, the U.S. is losing its lead in cutting-edge tools. The institute will examine various possible strategies as government looks to spur technology diffusion and industry consortiums to boost research.

Will anyone listen? There are serious doubts. To get White House approval, Bingaman agreed to let the institute be run as a federal entity administered by an outside think tank, which will be chosen shortly. This hurts the chances that its analyses will be taken seriously. Beyond that, the institute's board has no industry members—to avoid conflicts of interest—though the plan is to consult business at every turn. This step is crucial. "Without powerful industry input, the institute will be worth nothing," Ross says. Still, at least now there's a forum in which he and his colleagues can finally make themselves heard.

By John Carey in Washington

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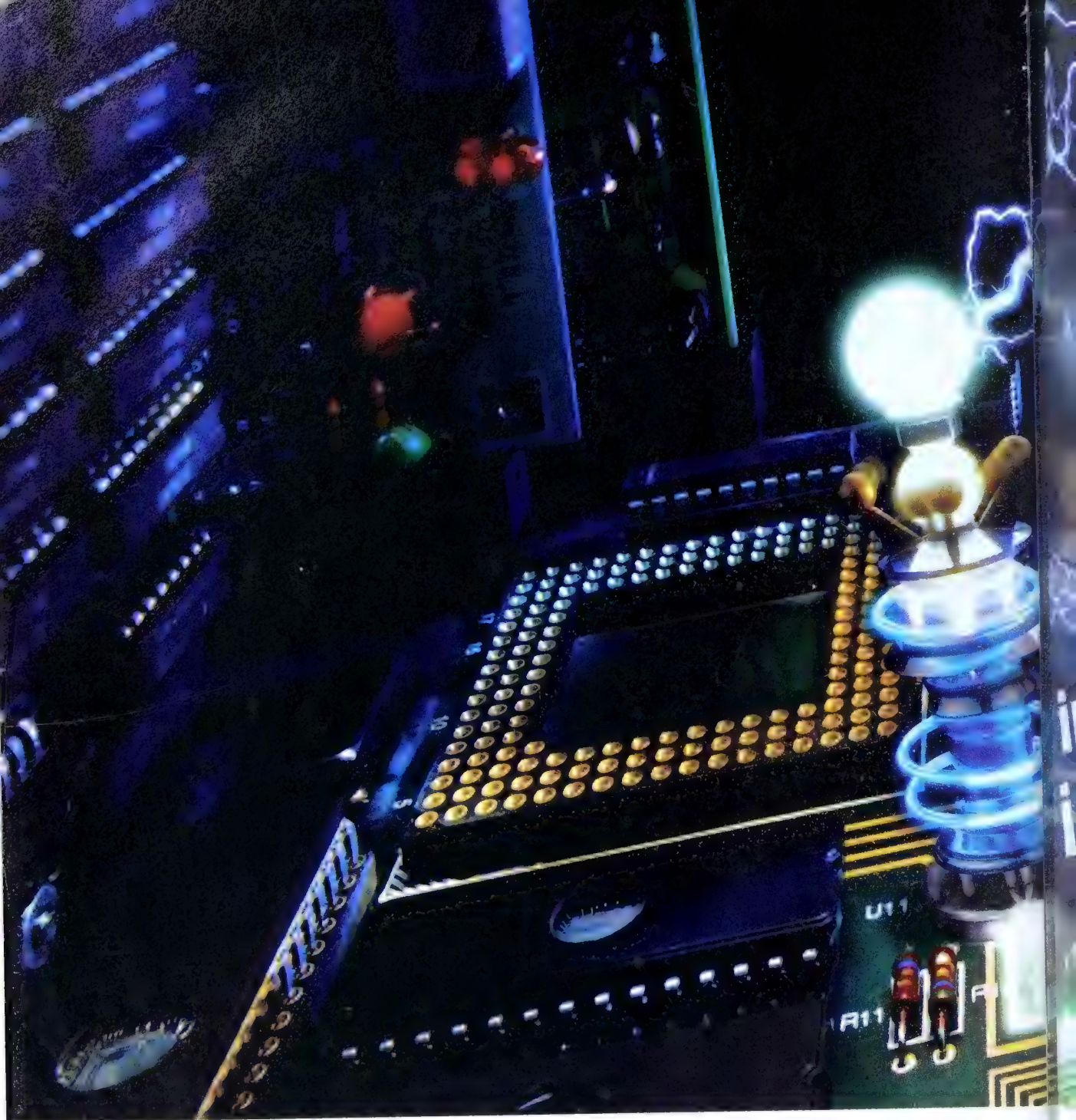
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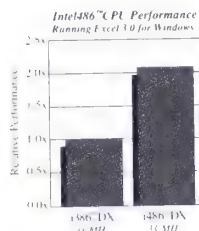


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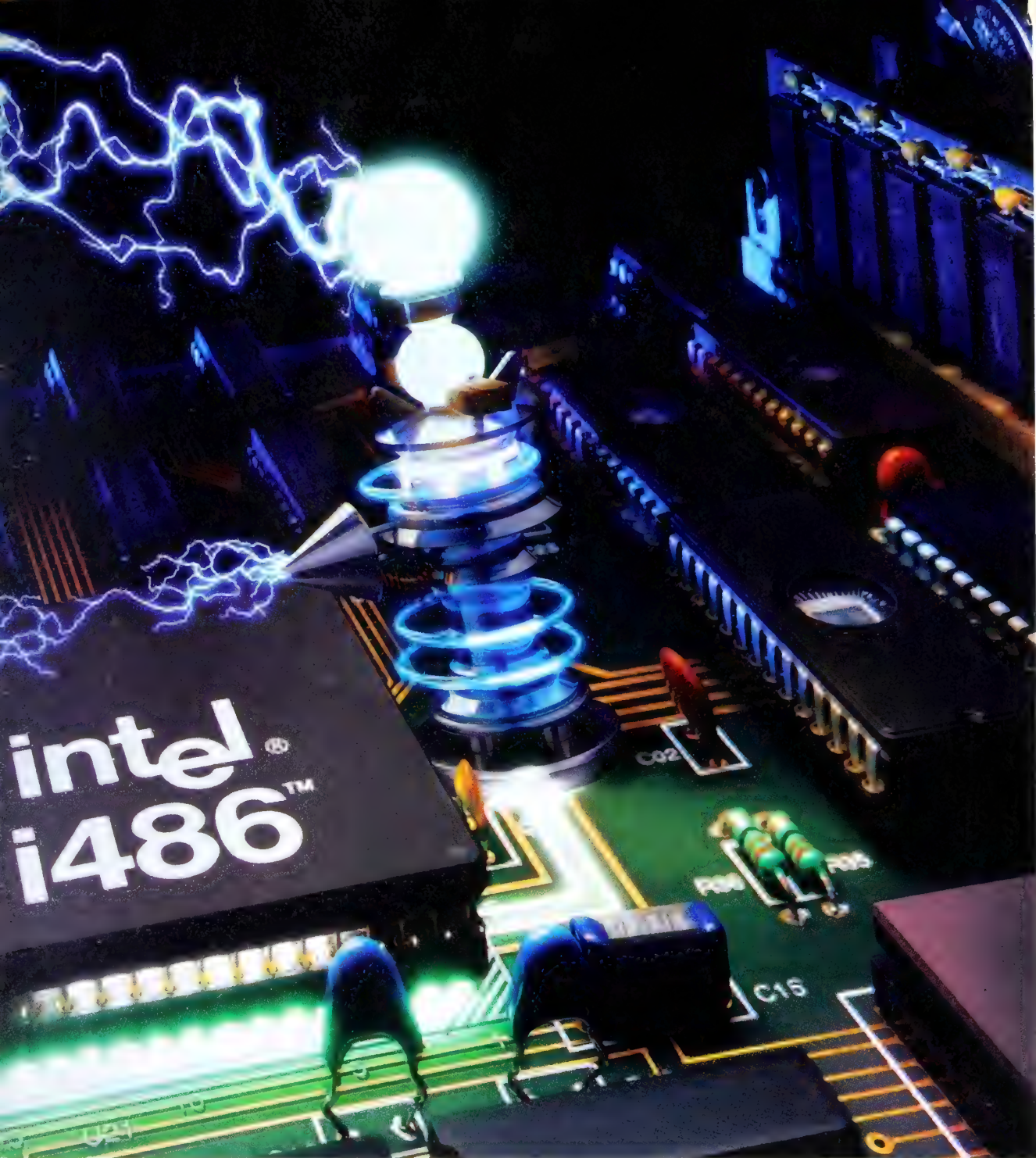
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EDITED BY SUNITA WADEKAR BHARGAVA

THIS CONTACT LENS IS A SIGHT FOR SORE CORNEAS



About 40,000 Americans a year have such badly damaged corneas that they require expensive corneal transplants to restore their vision. Now, researchers have fashioned a contact lens that could provide a cheaper alternative.

The key, says ophthalmologist Perry Rosenthal, a Harvard professor and founder of Polymer Technology

Corp., a Bausch & Lomb subsidiary in Wilmington, Mass., is using oxygen-permeable plastic to improve on the so-called scleral lens. Previous attempts to develop the lens failed because the materials used suffocated the cornea, often causing infection and discomfort. Unlike a conventional rigid gas-permeable lens, which is dime-size and sits on the cornea, the quarter-size lens rests on the sclera, or white part of the eye. It vaults the cornea, creating a space that is filled with artificial tears, which smooth out a damaged cornea's irregular surface and restore its optical integrity. The lenses, now awaiting FDA approval, could cost as much as \$1,000 each.

FOR THE CASH-STRAPPED RETAILER, THE 'POOR MAN'S ATM'

Ever found yourself short of cash while in line at a convenience store or fast-food restaurant? Tidel Engineering Inc. in Carrollton, Tex., hopes to put a stop to those frantic searches for the nearest cash machine. The company is rolling out what it calls a "poor man's ATM" that could make automated-teller machines affordable for almost any retailer.

Tidel has been making electronically controlled, time-delayed safes since 1978 to help protect convenience stores and other small outlets from holdups. Now, Tidel is marrying a new version of its safe with a card reader, modem, and other equipment needed to handle ATM transactions using any major credit or bank card. When customers enter an identification number to make a withdrawal from Tidel's AnyCard Cash System, they receive not cash but a ticket authorizing the withdrawal. A clerk behind the counter then punches the authorization number on the ticket into the safe's control unit to dispense the cash from the safe. Tidel's system costs about \$8,000, or half the price of the cheapest ATM on the market, says Patrick M. Martin, senior vice-president for marketing.

THE CHIP RACE: A U.S. UPSTART TRIES A LITTLE SLENDERNESS

All through the 1980s, Japanese conglomerates ruled the roost in semiconductor manufacturing technology. But now a comparatively small U.S. company, LSI Logic Corp., has come up with a process to bring to market powerful computer chips with the thinnest circuit lines yet—only 0.6 micron wide, or $\frac{1}{300}$ the width of a whisker.

Tinier circuit lines allow more transistors to be jammed onto

a given chip, for greater power and versatility. LSI's achievement is especially notable because the company specializes in custom-made chips that form the core of products ranging from camcorders to workstations. Until now, the skinkest circuits have always shown up first on memory chips, which have much simpler designs. But the thinnest memory circuits are 0.65 micron, and most come in at 0.75 or bigger.

LSI boosted R&D spending 34% in 1991 and relied heavily on computer simulation of manufacturing processes to cut development time and come up with new ways to etch circuits

THE NEW MATH FOR COMPUTING AIR FLOW

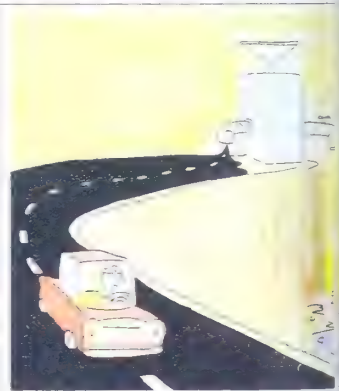
One of the hardest tasks for a supercomputer is to simulate gas or fluid flow—predicting, for instance, how air will flow around a new car body, or the way oil flows through a pipeline. The conventional approach is to describe the curves with differential equations based on standard calculus, then solve the complicated equations by computer. But digital creatures, computers are notoriously inept at estimating the solution to equations that describe smooth curves.

One researcher at Massachusetts Institute of Technology thinks he has a better solution: Get rid of the differential equations. Associate Professor Kim Mølvig has invented a new type of mathematics that he calls Aerodynamica. This approach divides a volume of gas, such as air in a wind tunnel, into a three-dimensional grid of tiny particles, then simulates the flow of air molecules with statistical equations. Mølvig is so sure this is easier math for computers to solve that he is trying to raise nearly \$10 million in venture capital and defense Dept. grants to create a new supercomputer company, Exa Corp.—in Cambridge, Mass. It will build supercomputers specifically designed to run Aerodynamica software. It will also design a chip that is adept at the new math and license it to other companies.

TAKE A LITTLE GRIT, ADD ASPHALT, AND PAVE YOURSELF A ROAD

Naval ships and submarines are usually sandblasted to give their outsides a thorough cleaning, a process that leaves in its wake thousands of tons of grit. Finding landfill space to dispose of the sand is enough of a problem. But the grit also contains paint and copper-based compounds that in California, at least, are considered hazardous wastes. That means they require special handling.

Now, scientists at Battelle Memorial Institute have a new solution: Instead of burying the grit, mix it with asphalt—which normally contains sand—and build roads. According to researcher Jeff Means, the mixing process dilutes and encapsulates the sandblasting residue, rendering it practically innocuous. The grit-recycling project was begun in 1988 when Naval Civil Engineering Laboratories in Port Hueneme, Calif., asked Battelle to test the process. So far, researchers have found that the asphalt complies with environmental regulations. The next step is to test its long-term stability.



IBM NEEDS A NEW NETWORK BUT NOT TOO NEW

How to update its 18-year-old SNA without alienating customers

Eighty IBM may have its share of problems, but the one in data networking is one that most of its competitors would kill for. Fully 62% of the largest U.S. companies use IBM's Systems Network Architecture (SNA) as their primary method for tying their com-

puters together, according to Business Research Associates in Newton, Mass.

But there are more than 10,000 data networks built on SNA. They handle reservation systems, transfer funds, coordinate vital core functions from inventory to payroll. Says a typical customer, "SNA is our lifeblood." "SNA is our bread and butter."

CHALLENGE. Here's the problem: The original SNA was developed after 18 years, denying improvements in the way. IBM needs to update its networking technology into the 1990s to prepare for the turn of the century, when network will blast text, audio and video at rates

of 100 million bits per second (table). But it's a delicate balance to strike. IBM must satisfy cutting-edge customers with new products for high-speed data communications, it can't also so radically that existing networks are rendered obsolete.

The job of fitting new onto old gracefully falls to Ellen M. Hancock, vice-president and general manager of IBM Networking Systems. "There are trade-offs, clearly," says Hancock. "If you started from a totally clean slate, certainly you could get to market faster."



Still, she's driving her \$5 billion, 12,000-employee line of business to hurry new technology to market by speeding up software development, delegating authority to seven semi-independent businesses, and market-testing new technologies even before their roles in IBM's

strategic plan have been fleshed out. IBM can't afford to take its time. That's the mistake it made in the 1980s. With SNA, IBM dominated nets built around mainframes. But it underestimated the enormous demand for personal computers and for software that ties them together in local-area networks that work independently of mainframes. SNA was designed for a pre-PC era when mainframes ran "dumb" terminals that could do no processing on their own. IBM's late start in local networks of PCs led to other missed opportunities, among them the now-hot market for systems that interconnect local-area networks. Such companies as Cisco Systems, Wellfleet, and Cabletron Systems are growing quickly by selling hardware and software for large-scale PC internet networks that rival mainframe setups.

PEER PRESSURE. To play catch-up and show customers where it's headed, IBM in March made what it called its most important networking announcement since 1974. Big Blue said it will take a much more aggressive approach to Advanced Peer-to-Peer Networking (APPN), an extension of SNA that reduces dependence on mainframes. New APPN software due out next year will make mainframes work as equals with other network devices—even PCs. That will make it far easier for PCs to get at mainframe data. And the company already is getting plaudits for its first router, a special computer that connects different brands of local-area networks. Called the 6611 Network Processor, it's slated for shipment in June.

The most important products are still percolating in the labs. IBM scientists and engineers are working on a device called Planet that can switch 10 million

RAISING THE DATA SPEED LIMITS

1957	1974	1985	1990	1998	2000
AT&T MODEM 300 bits per second. Transmitting data over telephone lines.	AT&T 209A MODEM 9,600 bits per second. The speed at which mainframes sent long-distance data in original SNA.	IBM TOKEN RING 4 million bits per second. For local-area networks of personal computers.	FIBER DISTRIBUTED DATA INTERFACE 100 million bits per second. To connect local-area networks between offices.	SONET 622 million bits per second. For voice and data connections over public fiber-optic networks.	GIGABIT LOCAL NETWORKS 10 billion bits per second. For all kinds of information, including 3-D moving images.

packets—or about 300,000 pages—of information per second. That's 150 times as fast as today's fastest router and gives IBM the hardware it needs to handle the high-quality video and graphics that will be commonplace on the networks of the future. But today's SNA can't take advantage of the full speed of Planet, so it could languish unless IBM raises the SNA speed limit—quickly.

This time around, IBM scientists promise not to let network architecture be an obstacle. So they are moving forward with Planet development even before network designers have detailed how every device will connect to it. Says Alan E. Baratz, director of high-performance computing and communications at IBM's multimedia unit in Hawthorne, N.Y., one of those pushing the pace: "We want to make sure that technologies that we understand better than anybody else get used in the marketplace."

The only way to do that is to get products out faster. "We realize that the time we can take to get to market is decreasing dramatically," says Hancock. She says IBM plans to try Planet out on its internal network by the end of the year, even though it's still a prototype.

'FREEZE TACTIC.' Skeptics still are waiting to see a new, fleet-footed IBM. They've heard pitches about new architecture before. "Unfortunately, they don't get paid per pound of architecture, or their stock would be going up, not down," says Robin Layland, engineering consultant in charge of network architecture at Travelers Corp. Litton's Garrity is equally dubious. "This [APPN announcement] is a freeze tactic to get you to not make a decision," he argues. "My biggest question is, are they really going to be able to deliver a usable product?"

They sure will, if Hancock has anything to say about it. As the world goes digital, boundaries between computers, communications, and media are blurring. Hancock wants to offer products for all three. Sure, those 50,000 SNA networks may be a lot of baggage to carry into the future. But they also give IBM some important advantages, notably detailed insight into how the world's largest corporations and organizations want to move information at gigabit speeds.

In the next century, such turbo-charged rates will be routine. While IBM has to retool its network designs for that era, so do its competitors. And despite its recent setbacks, IBM still spends \$6.6 billion annually for research, development, and engineering. Says Travelers' Layland: "It's like a roulette table: They can afford to place a bet on every number." The trick is persuading customers to wait while the wheel spins.

By Peter Coy in Hawthorne, N.Y.

SOFTWARE



FORMER SUB COMMANDER EUBANKS TRACKS DOWN THE BEST BUYS ON THE SOFTWARE HORSE

THIS BOSS MEASURES 6.0 ON THE RICHTER SCALE

Gordon Eubanks' shake-'em-up style has Symantec on the move

On Oct. 18, 1989, the day after the worst earthquake in 83 years roiled the San Francisco Bay region, Apple Computer Inc. employees who managed to show up for work at a four-story office building in Cupertino were told to go home. The building had not yet been declared safe, Apple warned. There was no such message for employees of Symantec Corp., a software company renting space in the same building. Gordon E. Eubanks Jr., the chief executive, was hard at work inside, and those not wary of the danger were encouraged to join him. Earthquake or

no, Symantec wasn't taking a breath.

And it hasn't since. Eubanks, on nuclear submarine commander, pushed Symantec from a sleepy also in personal computer software to one of the hottest companies in the field. Since its 1989 initial public offering, revenues have quintupled, to a projected \$215 million in the fiscal year ended March. And, analysts say, earnings probably leaped sevenfold, to \$23 million. The stock, which traded as low as 27 in November, broke 50 in January. Calm in the current market downturn trades at 38, but still has a higher price-earnings multiple than Microsoft Corp. Says analyst Peter Robertson of Robertson, Stephens & Co.: "Before it was Symantec-Who? now the company is one of the perennial favorites."

"Symantec II," as Eubanks calls it, began in 1985 when he realized he couldn't compete head-on with Microsoft and Lotus Development Corp. Instead, Symantec focused on niche "Utility" programs that help users manage their systems: organizing files and doing housekeeping chores account for about 65% of revenues. App

SYMANTEC'S SHOPPING SPREE

Acquisition/Specialty	Value/ Millions
SYMANTEC U.K. Distribution	\$27.0
DMA Remote access programs	20.0
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LEONARD DEVELOPMENT Mac software	3.0
PETER NORTON COMPUTING "Utility" and antivirus programs for hard disks	70.0
THINK TECHNOLOGY Software languages	2.1
LIVING VIDEOTEXT Presentation graphics	1.6
BREAKTHROUGH Project management	7.5

DATA COMPANY REPORTS

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tions programs such as Q&A, a simplified data base, make up about 30% of sales.

The key to occupying these niches quickly has been to buy up companies that have already identified them. Since 1987, Symantec has bought seven companies in pooling-of-interest stock deals, and a three-person team now reviews up to 10 new prospects a week.

Buying into new markets is easy. Making acquisitions work isn't. The key: Before closing, Symantec does its homework. Before the 1990 merger with Peter Norton Computing, which gave Symantec 34% of the \$410 million utilities market, a Symantec team spent two weeks at the Santa Monica (Calif.) company eyeballing personnel and products: Which packages were cutting edge? Where would employees fit?

The result: On the day the deal was announced, the merged company was up and running. That morning, Norton's 115 employees received personal letters telling them where they stood. Thirty-five—mostly in administration—lost their jobs, but those who were kept on knew their assignment, location, and salary. Generally, Symantec tries to hold on to employees of acquired companies and keep the programming and marketing teams that created successful packages.

'PUBLIC HANGINGS.' Still, by his own admission, Eubanks is a "hard person to work for." The 45-year-old bachelor works from 6 a.m. to midnight most days and sleeps in a two-bedroom apartment just 100 feet from Symantec's doors on weekdays. On weekends, he drives 60 miles to his 6,000-square-foot home in Pebble Beach. There's no stated pressure to work Eubanksian hours, says Marty Chilberg, Symantec's former controller, but "there is pressure to do more than is possible."

And there's little slack for employees who don't. Eubanks has been known to dress down workers publicly, a practice one calls "public hangings." Says Eubanks: "I'm very tolerant of people who get results. I don't have patience for those who don't." So far, the approach has worked. But some analysts worry about the flip side of Eubanks' style—namely, that he might make a bad decision he can't be talked out of. "Having Gordon at the helm is a tremendous plus as long as he's right," says analyst Nancy McSharry of International Data Corp. "If he isn't, I don't know who's there who could set him straight."

There are signs Eubanks has mellowed—just a bit. The day after the 1989 earthquake, he says now, "was a real screw-up. I didn't handle that right." Today, he says, he would be mindful of employees' fears and send them home. But you can bet he would still be inside, manning the phones himself.

By Kathy Rebello in Cupertino, Calif.

Media



HOME IMPROVEMENT, THE YOUNG INDIANA JONES CHRONICLES, CIVIL

TELEVISION

WHY THE LOSING NETWORK IS STILL A WINNER

ABC may be No. 3 in the Nielsens, but it's No. 1 at the bank

Daniel B. Burke knows one Los Angeles phone number by heart. It's the one he dials to find out how many Americans tune in to his network each night. Lately, the chief executive of Capital Cities/ABC Inc. has heard scant good news from the tape-recorded voice. ABC trails both CBS and NBC in prime-time viewership. On a recent Saturday, the network of Peter Jennings and Roseanne Arnold slipped behind even Fox Broadcasting Co., the cheeky home of Bart Simpson. "I'm sort of running out of excuses," says Burke.

Yet the 63-year-old executive remains serene. That's because his network turned a profit last year while the CBS and NBC networks lost millions. Burke would love to beat his rivals in the Nielsens. But he argues that in a depressed economy, spending big to be No. 1 is a fool's game. Spiraling sports-programming costs and the advertising slump have made it virtually impossible to win the ratings and still make money.

So, Burke has walked away from the Nielsens—at least for now. His formula for ABC is simple: Cut costs, develop bread-and-butter programs, and eschew

the lavish sports deals that have pumped profits from CBS and NBC. While the advertising drought pummeled the network, ABC still eked out \$120 million in 1991 operating profits on revenue of \$2.6 billion. The network accounts for half of Cap Cities' revenue and 15% of its operating income. But the slump battered the company's TV station magazines. All told, Capital Cities' operating profit plunged 18%, to \$100 million, on revenues of \$5.38 billion. **CHEAP SITCOMS.** ABC's financial success demolishes a hoary belief of network television: Ratings guarantee profits. Consider CBS. The network vaulted from third to first place this season, not because of a blockbuster sports deal that included the World Series, the Super Bowl, and Winter Olympic Games, but because of the stratospheric fees it paid to televise these events left the network with \$100 million in 1991 losses.

By contrast, ABC has packed its schedule with relatively cheaper sitcoms such as *Full House* and *Coach*. It also has reality-based shows such as *America's Funniest Home Videos*, which are produced on a lower budget. What's more, ABC



POTENTIAL FLOP

gh ratings for several of these had the only new hit of this the sitcom *Home Improvement*. tght shows ABC introduced last ould return as many as five, and NBC may not return any. twork has paid a price for its y, however. Without CBS's mar- ts offerings, ABC saw its prime- rship decline 3% this season . Worse, the network is losing ts historic appeal to the youn- ers advertisers crave. After CBS and NBC en and women o 49, the net- trails both r-ong younger and barely t CBS among en. While aking money audience ero- hurt its long- spects. When ing picks up llars will inev- w to the net- th the largest desirable audi- o matter how t, we're still in cedes the no- Burke.

is determined ure ABC's pri- ong younger even loosening work's purse r a few flashy vs. ABC spent

\$6 million to buy six episodes of *Young Indiana Jones Chronicles*, an action show produced by George Lucas and based on his movies. The network is also gambling on *Dinosaurs*, a sitcom that features anthropomorphic dinosaurs in a domestic setting. With its elaborate models, *Dinosaurs* costs nearly \$1 million per episode—roughly twice the average half-hour show. Because of its price tag, Burke himself visited the show's Hollywood set before signing off on it.

'MORE DIFFUSE.' ABC hopes that shows such as *Young Indy* will counter a perception in Hollywood and on Madison Avenue that the network has muddled its youthful profile. Noting that ABC recently picked up the NBC crime drama *Matlock*, which appeals to older viewers, former NBC Chairman Grant Tinker says: "They do seem to have become more diffuse in recent years." Fox hasn't helped, either: Rupert Murdoch's network has courted young viewers so effectively that some marketers say it has chipped away ABC's franchise. "Unlike Fox, ABC doesn't have a brand identity as a young network," says Philip Guarascio, executive director of advertising at General Motors Corp.

ABC executives concede that Fox has done some damage. But Marvin F. Goldsmith, president of the network's ad sales, says advertisers would deem Fox's on-the-edge programming offensive if it aired on one of the big three networks. "Do I wish I had *Beverly Hills 90210*? Absolutely," he says. "Do I wish I had *In Living Color*? No way."

The network may also wish it didn't have its \$10 million production deal with Steven Bochco, the producer of *Hill*

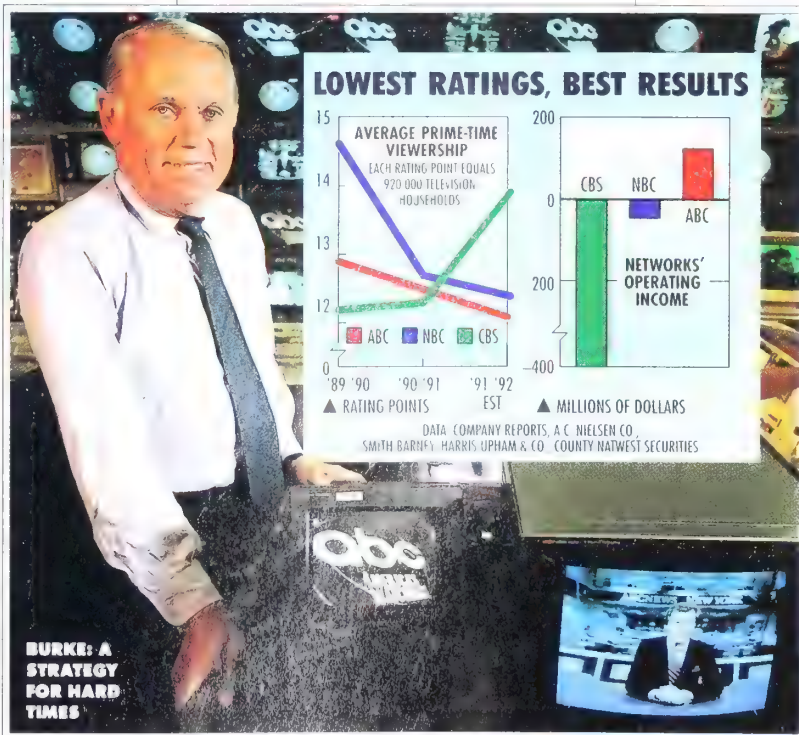
Street Blues and *L. A. Law*. Halfway through the 10-show contract, Bochco has produced only one hit, *Doogie Howser, M.D.* His newest show, *Civil Wars*, is languishing. Robert A. Iger, president of ABC Entertainment, says he probably wouldn't pay those terms in today's economy. Indeed, Hollywood producers say ABC is the toughest negotiator of the three networks: "They don't just open their checkbook and say, 'Here it is,'" says Rich Frank, president of Walt Disney Co.'s television studio, which produces *Dinosaurs*.

Sports is another lingering headache. ABC may not have the gargantuan debts of CBS, but the network's sports division still lost more than \$50 million in 1991, mostly because of its \$900 million contract to telecast *Monday Night Football*. The network insists it will continue to pass on big-budget events, including the Olympic Games, unless rights fees come down. "It just doesn't make sense to put your whole network at risk for 16 days in August," says ABC Sports President Dennis D. Swanson.

SHOWDOWN. While Swanson and Iger hold the line on sports and entertainment costs, Burke has installed a new manager to streamline ABC News. Stephen A. Weiswasser, a former Cap Cities lawyer, became the day-to-day chief under President Roone Arledge last November. Now, he is meeting with staffers to figure out how to reduce costs. One innovation: ABC will rent some of the editing equipment for its *20/20* and *PrimeTime Live* shows from production houses. ABC also recently laid off 15 staffers in its Washington bureau. Yet Weiswasser insists he's not just a cost-cutter: "I'm not a corporate philistine from Cap Cities." He points out that ABC News is investing in a news show that will go head-to-head with CBS's venerable *60 Minutes* this summer.

Given ABC's strong news credentials, Sunday evenings could become a ratings battleground. But the real key for the network is whether shows such as *Young Indiana Jones* will win back its wandering young viewers. ABC found the formula to ride out the worst downturn in network TV history. Now, the No. 3 network must make sure it can cash in when times get better.

By Mark Landler in New York and Ronald Grover in Los Angeles





SAVINGS & LOANS

RESOLVED: RESOLUTION TRUST CORP. IS DOING A CREDIBLE JOB

Even critics admit that it's selling off S&L assets with creativity

On Apr. 1, the House of Representatives pulled its own version of an April Fool's joke on the government agency created to clean up the savings and loan fiasco. Lawmakers cut off funding to the Resolution Trust Corp., money that Congress had already appropriated.

Part of the reason was politicians' election-year nervousness about the cost of the cleanup, which has soared from \$50 billion to \$160 billion, not including hundreds of billions in interest on the bonds the RTC has to float. Yet the cut-off, which likely will be lifted within a few weeks, also stems from Washington's rather dismal regard for the RTC. Since its creation 30 months ago, the agency has been regularly lambasted for wasting taxpayers' money through giveaway deals with private investors, exacerbating the real estate depression, and

general mismanagement. It recently was disclosed that the RTC's Denver field office couldn't keep track of \$7 billion in assets under its control.

But in the eyes of those who deal with the agency, including some of its most severe former critics, the reality is quite different. By almost any measure, the RTC has done a remarkably effective job. After staffing a financial institution that has grown bigger in assets than Citicorp, the RTC has shuttered 644 thrifts and disposed of two-thirds of the \$360 billion in assets it acquired from failed S&Ls. In doing so, it has managed to recoup a respectable 95% of the value of its more liquid assets, such as securities and performing loans, while gaining an average of 70¢ on the dollar for real estate sales. And, as it begins winding down operations, it is proposing to shed half of its 8,000 employees. "They were

making all kinds of mistakes," says former critic David M. Bick, managing director of Manhattan Capital Partners Inc. "But they've come full circle and just pulled themselves together."

OVERHAUL. Admittedly, the task is far from complete. There's still \$123 billion in mostly hard-to-sell assets on the RTC books, including what some call the agency's "toxic waste." These range from raw land to half-finished apartment buildings. And the RTC could pick up billions more to unload if, as expected, additional large thrifts fail. At the end of last year, 35 S&Ls, with \$1 billion in assets, were technically insolvent but still operating.

Criticism of the thrift rescue was widespread even before the RTC was established. Early asset sales in 1988, the Federal Home Loan Bank failures were regarded as so lucrative to buyers



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sues, totaling \$10.3 billion.

The agency followed up that success in March by selling \$358 million of securities backed by commercial mortgages. The move is risky and unusual, since commercial loans are not as standardized as residential mortgages. As a result, the RTC has set up a reserve fund equal to 30% of the face value of the securities to protect investors against potential defaults. If forced to pay off, the RTC would have to eat a discount of 30¢ on the dollar. But if the loans continue to perform, the RTC will recoup the set-aside. Analysts are watching the sale of future securities closely, because it may attract more investors and provide needed liquidity and capital for the commercial real estate industry.

Innovation at the RTC doesn't stop there. The agency has unloaded billions of dollars in inventory by bundling together good and bad assets. Using its dwindling supply of top-grade assets as

THE RTC'S BIG CLEANUP

	Total assets seized	Sales and recoveries	Remaining assets*
Billions of dollars			
Cash, stocks, and bonds	\$119	\$102	\$17
Mortgages, including single-family and commercial	150	91	59
Loans, such as auto and credit-card loans	38	19	19
Real estate, including foreclosed properties	24	7	17
Other assets, such as seized artworks and office furniture	26	9	17
Total	357	228	129

*As of Dec. 31, 1991

DATA: GOVERNMENT ACCOUNTING OFFICE

a lure, it has successfully enticed investors to pick up bad loans and marginal real estate. Miami-based homebuilder Lennar Corp. and Morgan Stanley & Co. recently outbid other investors for a \$900 million portfolio of lucrative/lousy assets from the former AmeriFirst Federal Savings of Miami. They paid 50¢ on

the dollar for the properties. "You had major institutions fighting to buy difficult real estate," says Martin W. Taplin, a South Florida workout specialist. "I think the government got a fair price."

What seems fair today's depressed market, however, may be viewed differently in the future. The RTC's very success sows the seeds of its undoing. As the RTC heads into the home stretch, it could become more vocal in its remaining assets being harder to sell—and smaller returns. That raises the likelihood that smart-money operators with staying power could clean up at taxpayers' expense. Withstanding the howls of second-guessers several years down the road could easily prove to be the RTC's biggest challenge yet.

By Tim Smart in Washington, Wendy Zellner in Dallas and DeGeorge in Miami



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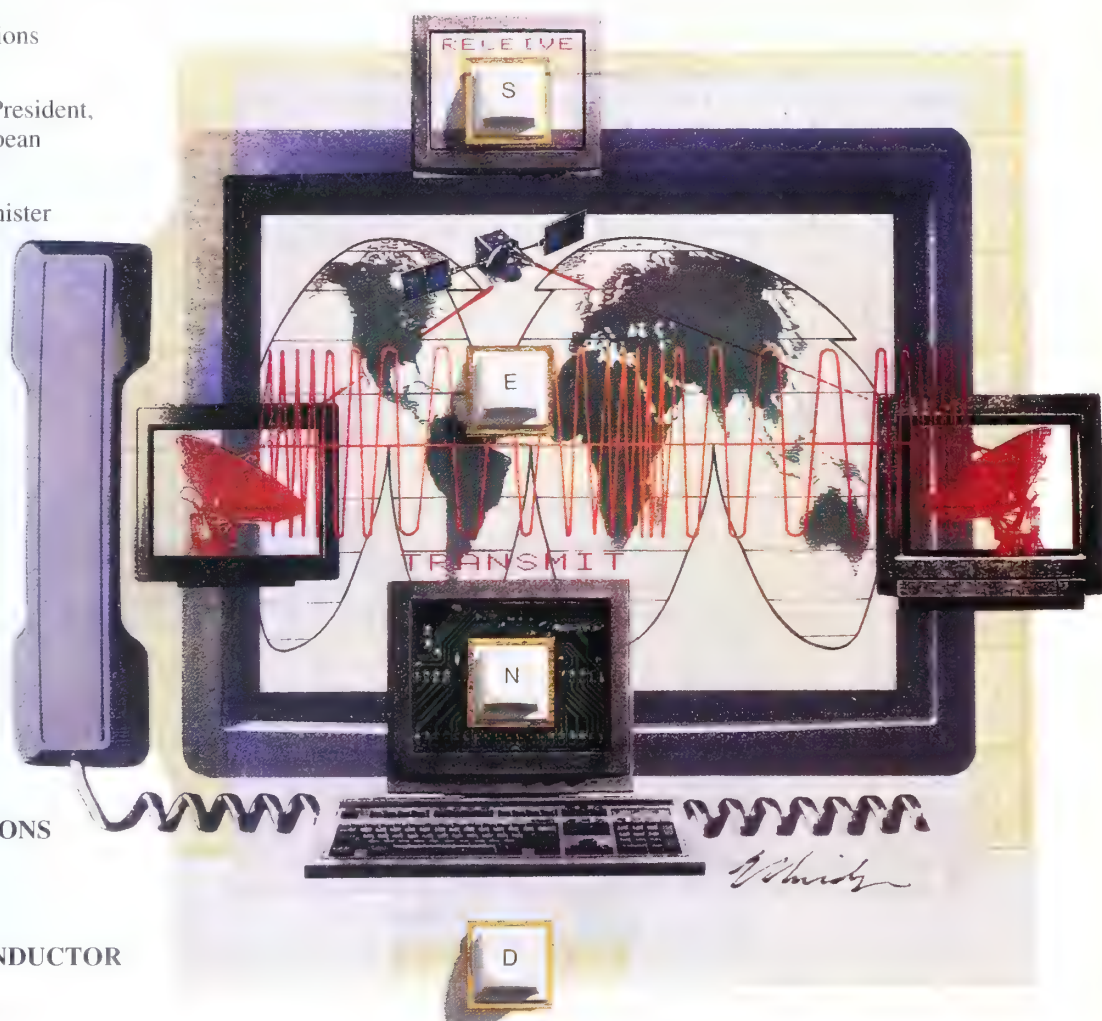
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A DECLINE THAT WAS WAITING TO HAPPEN

Sure, the Nikkei rocked the Dow—but a correction was due anyway

For months, investors have flocked to stocks more by default than by choice. Money-market funds and certificates of deposit offered the skimpiest returns in decades. Bond prices were hit by a soaring budget deficit and fears of inflation. And no one had any enthusiasm for real estate.

Suddenly, it seems, investors have lost their stomachs for stocks. The Dow Jones industrial average, which closed at 3275 on Apr. 6, was hit by a wave of selling that sent the average down 62 points on Apr. 7 and another 32 points on Apr. 8—a total of 2.9%.

What's giving investors heartburn is Tokyo. Japan's already-sick stock market has taken a decided turn for the worse. True, for most of the past two years, the world's two largest stock markets have gone their own ways—with the U.S. market making new highs. But on Apr. 7, the Nikkei dropped 3.5%, continuing the pounding that has clipped 3000 points, or 15%, off the market in the last two weeks. "Japan's impact on the U.S. market is psychological," says market analyst Laszlo Birinyi of Birinyi Associates. "It gnaws away at investor confidence." In the stock market, psychology is reality—and the probable reality is continued market jitters over the next few months.

MORE WOES. The news from Japan will set investors' teeth on edge: It's going to get worse before it gets better. The Japanese economy is entering a recession, its banks face huge loan losses, and real estate prices are plummeting. "It's not a panic yet," says Jason C. James, market strategist at James Capel Pacific Ltd. "But it's starting to feel that way."

Hard times are hitting the once-omnipotent Japanese insurance companies,

too. "There has been a rumor that [Japanese] insurance companies are selling U.S. stocks and bonds to cover losses" at home, says Seiyu Nakao, a general manager for overseas securities research at Nomura Research Institute. "But the truth is that they don't own much U.S. stock." He says that any selling done to shore up the books at home would have been done prior to Mar. 31—the close of Japan's fiscal year. The Jap-

weighted more toward growth stocks, which are what many investors sold to buy cyclicals. Even the Russell 2000, a measure of small-cap stocks, the bright spot of the market—is now only a slight higher than at the start of the year. In mid-February, it was up nearly 12%.

FALSE STEP. "This market is badly in need of lower interest rates, stronger earnings, or a little of both," says Stephen B. Timbers, chief investment officer for Kemper Financial Services. But it's questionable whether the market will get either anytime soon. Long-term interest rates have been a big disappointment. They're now about a percentage point above their year-ago level. Many investors bid up stocks, expecting just the opposite.

First-quarter profits, which are starting to roll in, may not be up to snuff either. Benjamin Zuckerman of Zacks Investment Research says that recent revisions to first-quarter earnings forecasts of analysts have all been downward. "Six weeks ago, we thought earnings would be up 8%," says Zuckerman. "Now, they look like they'll be flat."

Despite the problems, the odds are that the current sell-off is a correction that could take the stock market down to as far as 3000. But it's the start of a bear market. "If the Dow hits 3000, we could bounce back to new highs this summer," says investment adviser J. Michael Pinson. Kurt Feuerman, vice heads research in emerging growth stocks for Morgan Stanley & Co., figures the "massacre" of small stocks is just ab-

over. The market, he says, had to correct the "excesses of the past months," including an overheated market for initial public offerings.

History shows bull markets don't end until the economy is humming along. That means that despite the correction, this bull market has far to run. So while the current worries—including the coming from Japan—may make some nervous about holding stocks, for the long-term investor, equities are still very much the only game in town.

By Jeffrey M. Laderman, with Gary Weber in New York and Ted Holden in Tokyo



anese own scads of U.S. government securities, but that market has been fairly quiet while stocks took the heat.

The time for a correction in the U.S. market was ripe without any prompting from abroad. Indeed, while the Dow has been holding its own all year, other market measures have been deteriorating. The Dow's strength has come from its cyclical stocks, which investors bought as a way to profit from the recovery in the economy. The Standard & Poor's 500-stock index hit 1992's high of 420.8 on Jan. 15 and has fallen 6.3% since. The S&P has been weaker because it is

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area for companies, Wall Street's hot item is losing its allure

ey source of Wall Street's
ountful profits these days is a
ot product that bolsters corpo-
ance sheets with fresh equity
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k, at least for the time being. In
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an, it is called PERCS, short for
d Equity Redemption Cumula-
k. PERCS, which are preferred
at convert to common in three
ave become extremely popular
orporate America, attracting an
ng \$7 billion in capital since they
roduced last June.

e is, PERCS' days of glory may
vered among both issuers and
(table). Institutional buyers,
e up 40% of the PERCS market,
ng up to their limitations. So
anies, many of whom may find
r to sell debt.

PERCS offer investors alluringly
dends, from 7% to 9% annually
ree years before PERCS convert
on. Morgan Stanley & Co.,
vented PERCS, figures that's a
ood return for a short-term in-
. A comparable Treasury pays
hat edge vanishes.

WISE: The big downside is that
nit investors' capital gains. If
of the common stock rises to
ersion price, usually about 30%
an the price at issue, PERCS are
ed for common on a share-for-
sis. But if the stock rises higher
conversion price, then PERCS
get only a fraction, perhaps half
share. That's good for corpora-
essens the dilution of their com-
ek. Yet it's bad for investors.
chard E. Dahlberg, portfolio
of the \$1 billion Massachusetts
Total Return Trust: "People
ng wise. The game is totally in
the companies."

t diminished investor interest.
ormally issued at the same price
on shares, are supposed to
tandem with the common. But
y were first sold, several PERCS
otably those of Kmart, Olin,
and Texas Instruments—have
ehind their companies' common.
sloved the corporate rush into
ourteen were announced from
January, and none has appeared
e past three months.

Corporations are also coming to appre-
ciate that PERCS work well only during a
buoyant stock market, far from a sure
thing over the long term. The full share-
for-share exchange they must make if
the common doesn't bust through the
conversion-price barrier can dilute the
common and hurt earnings per share.

Tenneco Inc. is a good example of the
pros and cons of PERCS. Tenneco has a

ing firm in Weston, Mass. That scenario
is credible: Tenneco's stock has suffered
losses partly stemming from drooping
natural gas prices.

PERCS may be even less advantageous
for less indebted companies. Check out
consumer-electronics retailer Tandy
Corp., which boasts a decent A rating
from Standard & Poor's Inc., a pristine
18% debt-capital ratio, and strong cash
flow. Tandy did a \$442 million PERCS
issue in February, even though bonds
would have been cheaper because inter-
est payments on debt are tax-deductible.
Preferred dividends aren't. "Why not
take the tax break?" asks Andrzej K.
Rojek, a vice-president for capital mar-
kets at Bankers Trust New York Corp.

Tandy says it went the PERCS route
out of concern that new debt is anathe-

PERCS... Overleveraged? For a good many companies, Preferred Equity Redemption Cumulative Stock is an alluring solution. PERCS, preferred stock that pays a high yield and automatically converts to common three years after issue, lets a company increase its equity base without diluting common shares for the three-year period. And if the price of the outstanding common is higher than the conversion price after three years, PERCS shareholders get fewer shares of new common

...AND THEIR PITFALLS

As good as all that sounds for issuers, some are discovering that these securities have serious drawbacks:

- If the common's price falls short of the conversion price after three years, the company must convert the PERCS to common on a share-for-share basis. That dilutes the common stock, which reduces the company's earnings per share
- Some companies would be better off issuing debt, whose interest payments are tax-deductible. Preferred dividends aren't
- It's getting harder to find PERCS buyers. Investors are now focusing on the fact that despite the high yield, PERCS can sharply limit their chance for capital gains

DAIA BW

BBB- credit rating, one notch above
junk-bond status. Its debt level is an un-
comfortable 55% of total capital. So add-
ing more debt could lead to a down-
grade, which would mean the company
must pay sharply higher interest rates.
Thus, boosting equity by selling PERCS
makes sense. But should Tenneco com-
mon, now trading at \$37, not exceed the
\$42.75 conversion price, earnings per
share would be reduced by 14%, accord-
ing to Mitchell & Co., a financial consult-

ma to the ratings agencies nowadays.
Perhaps. Tandy's sanguine profit out-
look, however, should allay those fears
and allow it to skirt PERCS in the
future.

New derivative securities on Wall
Street often wear out their welcome.
Ditto PERCS. Says Marion M. Dixon,
portfolio manager for Decatur Funds I
and II: "I don't predict that the future
for PERCS is very perky."

By Larry Light in New York

BY GENE G. MARCIAL

BETTING THAT SMALL FRY HAVE JUST STARTED TO SIZZLE

When money runner Jim Awad resigned as president of BMI Capital several weeks ago to set up his own company, two former Harvard business school classmates—Rockefeller & Co. President Tom Barry and Raymond James Financial Chairman Thomas James—agreed to join his board. The mission of this big-money trio: Invest in small-cap stocks.

Barry and James pumped equity into the new Awad & Associates Asset Management, which already has more than \$100 million under management. Rockefeller & Co. manages the Rockefeller family's assets. Raymond James is a publicly traded securities firm.

Although secondary stocks have been hot since last year, Awad believes that "the cheapest part of the market is still the small-cap group." And with the economy picking up, the small to midsize companies that "have special franchises and niche businesses" will be the big beneficiaries, he adds.

BASEBALL CARDS. The best bets, says Awad, are stocks whose price-earnings ratios are below the market's p-e, whose balance sheets remain strong, and whose earnings growth is upbeat. Most of his small-cap favorites, says Awad, have done well despite the recession. "The risks are small, and the upside potential big," he insists.

Awad is bullish on:

■ **Gibson Greetings.** One of the two giants in the greeting-card business, it posted record sales of \$524 million in 1991. This year, Awad expects earnings of \$2.75 a share, up from 1991's \$2.61.

■ **House of Fabrics.** The 667 chain-store retailer of household fabrics, the nation's largest, had record sales of \$493 million and record earnings of \$1.44 a share in the year ended Jan. 31, 1992. Awad expects earnings to jump to \$1.75 a share this fiscal year.

■ **Huffy.** The country's largest maker of bicycles is a play on the upswing in sales of sports and leisure products. It produced record sales of \$680 million in 1991 and is expected to earn \$1.75 a share, up from 1991's \$1.41.

■ **Lillian Vernon.** A direct-mail marketer of specialty gift items, of which 85% are imported, is benefiting from the success of its new *Lilly's Kids* catalog. So Awad sees earnings rebounding to

AWAD'S SMALL-CAP PICKS

Stock	Recent price	P-E	Six-month goal
GIBSON GREETINGS			
Greeting cards	\$26	10	\$44
HOUSE OF FABRICS			
Fabrics retailer	18	11	28
HUFFY			
Bicycles	17	10	28
LILLIAN VERNON			
Direct-mail catalog	15	12	20
PIER 1 IMPORTS			
Specialty stores	9	12	12
TOPPS			
Gum, cards, and comics	16	12	22

DATA: AWAD & ASSOCIATES ASSET MANAGEMENT

\$1.25 a share in the year ended Feb. 28, 1993, from 1992's estimated \$1.

■ **Pier 1 Imports.** North America's largest retailer of low-ticket home furnishings posted record results in the year ended Feb. 29, 1992, helped by its nursery unit. Per-share net zoomed to 71¢ a share from 17¢ last year. Awad expects 75¢ in 1993.

■ **Topps.** Known for its Bazooka bubble gum and baseball cards, it has formed a comic-books unit to create "high-quality color" books to tap a niche market. Awad sees earnings of \$1.35 this year, up from 1991's \$1.15.

A BLOCKBUSTER AT MEDIMMUNE?

When Earvin "Magic" Johnson stunned the world last November with his admission that he had HIV, the virus that causes AIDS, shares of MedImmune were among the "AIDS plays" that shot up, hitting 55 a share. The stock has since slumped, to 30, but the fall is just dandy for several big investors, who are now buying in.

Why? For one thing, MedImmune is one of the few biotechs already making a profit from actual product sales. "It's just unfortunate that MedImmune has been branded only as an AIDS play, because it has several other products that will make it a successful biotech company," says Richard Beleson, an analyst at Capital Research Group.

Late last year, MedImmune started selling CytoGam, an injectable immune globulin made from human plasma. The Food & Drug Administration ap-

proved CytoGam for the treatment of diseases caused by cytomegalovirus (CMV) infections in kidney transplant patients. For this alone, CytoGam could produce revenues of \$60 million a year, says MedImmune President and CEO Dr. Wayne Hockmeyer. Another product, Hypermune-RSV, designed for treating respiratory syncytial virus (RSV) infections in children, has an estimated annual market of \$400 million and could be on the market next year, approved by the FDA.

But the potential blockbuster is MEDI-488, a human monoclonal antibody that, says Hockmeyer, has been shown in lab tests to be effective in neutralizing a wide variety of strains of HIV. Merck signed a pact with MedImmune last year to fund its production with \$13.3 million over three years.

Bear Stearns analyst Joe Riccardi expects MedImmune to earn 25¢ a share in 1993 and 17¢ this year, up from 1991's 11¢. He sees \$2 by 1994, exclusive of MEDI-488's potential.

IN A WORD, PLASTIC

Pure Tech International is one of the few environmental stocks that has been spiraling upward, vaulting from 3½ a share in January to 8¼ on Apr. 8. What's firing Pure Tech is the fast-growing market for recycled plastics.

Prudential Securities Analyst John Bogner says Pure Tech has transformed itself from a collector of solid waste materials—such as bottles and beverage cans—into a big processor of upgraded plastic materials.

Bogner expects Pure Tech earnings to jump from 1991's \$200,000, or 9¢ a share, to \$1.6 million, or 45¢ a share, on sales of \$20 million this year. He sees \$2.8 million in profits, or 80¢ a share, on sales of \$28 million in 1993. Chairman Simon Sinnreich says sales could hit \$100 million in five years.

Pure Tech's low-cost processing technology converts waste, such as polyurethane terephthalate found in plastic bottles, into usable flakes for use in recycled products. "It's on a fast-growth track in an area of vast potential," says Bogner, who expects many states will start enacting laws mandating a specific recycled content per container. Despite Pure Tech's rapid rise, Bogner says that the stock is still undervalued based on its earnings prospects. The stock, he thinks, will be in the 20-to-25 range by next year.

My Rock Of Gibraltar.



He looked like a young George Burns. That's what all the girls used to say. He actually used to call me Gracie. When he was shipped overseas he wrote twice a week. He sent letters from Germany and Paris, and once he even sent one from the front lines. I think he's written more meaningful words on paper with that Cross pen than he's ever said to me in person. He still uses the same pen, and always jokes that it will last longer than he will. But I bought him a new Cross ball-point pen; I want to save the old one for myself. It reminds me of the time when I received a bunch of letters addressed to a girl he called Gracie.



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FROM BULLETS TO BULLET TRAINS: IT WON'T BE EASY

Arms makers rush to retool—but they may not save enough jobs

The scene is a sprawling control room in Las Colinas, Tex. Amid a sea of computer terminals, an operator employed by Westinghouse Electronic Systems, a leading maker of defense radar and electronic warfare gear, peers at a workstation. Suddenly, the monitor flashes red. Enemy planes on the horizon? Nope, just an alarm going off in a house protected by a Westinghouse home security system.

Welcome to post-cold-war reality. With deep cuts in U.S. military spending forcing them to downsize dramatically, most defense contractors are turning to an idea as old as beating swords into plowshares. Today, it's called defense conversion, and many contractors see it as at least a partial solution to offsetting defense cuts. "We're leveraging our defense technology and expertise into other areas," says Richard A. Linder, Westinghouse Electronic's president.

Such efforts face an uphill battle. Historically, "success rates [have] ranged from low to terrible," says consultant Robert D. Paulson of McKinsey & Co. Sal Monaco, a consultant with forecaster DRI/McGraw-Hill, figures that this time conversion can offset "maybe 25% or

30%" of lost defense contracts—way too little to make up for the 530,000 to 920,000 private-sector defense jobs the Office of Technology Assessment expects to be gone by 1995. Some states are already trying to help companies diversify. And if elected, Democrat Bill Clinton vows to make conversion "one of the highest items on my agenda."

Still, many contractors believe that even without such help their prospects for making the transition are bright. Most are trying not to veer off into big ventures in unrelated technologies, something that tripped up conversion efforts in the 1970s. And they're focusing more on nonmilitary government work, where their Pentagon experience gives

them an edge. Since 1987, for instance, TRW Inc. has used systems and software knowhow it developed for the military to double its nondefense government revenue to \$500 million annually. Hoping for similar gains, more than half of 48 defense contractors surveyed last year by Winbridge Group, a Cambridge (Mass.) consultant, had started marketing commercial products based on defense technologies.

The list includes most of the industry's big names. Lockheed Corp. is doing everything from building satellites to hunting down parking-ticket scofflaws for the city of Los Angeles to maintaining aircraft in a joint venture with Hungarian Airlines. Northrop Corp. is mulling a deal to make mass transit cars with Japan's Sumitomo Corp. Westinghouse Electronic's civilian businesses include air-traffic-control systems and a bus-tracking system used in Baltimore, Milwaukee, and Denver.

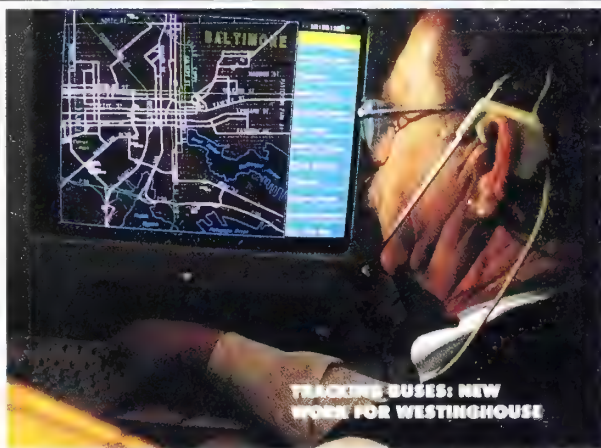
PLANE DEALER. To succeed in civilian markets, military contractors have to get nimbler in a hurry. To that end, says McKinsey's Paulson, his clients have been "talking about things that five years ago would have been out of bounds."

Such soul-searching recently led Hughes Aircraft Co. to hire top executive C. Micfe Armstrong—rather than an experienced defense manager—as its new CEO. Armstrong's mandate: propel commercial work to at least 50% of sales from 30% now.

Hughes figures that Armstrong's experience in the rough-and-tumble computer industry will help power its commercial takeoff. The General Motors Corp. unit recently

sold Northwest Airlines \$70 million worth of personal video screens on planes. It has launched a line of arcade games based on its flight-simulation knowhow. And it has converted a rare parts plant to make power-system parts for GM's new Impact electric car.

If anything, small contractors are converting faster than big ones. In 1989, little J. T. Slocumb Co. generated 60% of its sales from engine parts for military fighters. The South Glastonbury (Conn.) company has since reduced its dependence on the Pentagon by boosting marketing staff and sinking \$1.5 million into a forging plant that makes parts for Pratt & Whitney engines for Boeing jets. The result: Revenues stayed steady at \$39 million, but defense produced



TRACKING BUSES: NEW WORK FOR WESTINGHOUSE

WHERE DEFENSE CONTRACTORS ARE SEEKING NEW BUSINESS

WESTINGHOUSE ELECTRONIC SYSTEMS Makes home and commercial security gear, airport and weather radar, airline reservation systems, mail-sorting equipment, and systems for tracking mass transit and commercial fleets. It's also designing power systems for electric cars

HUGHES AIRCRAFT Manufactures avionics and video systems for airliners, plus high-tech arcade games. It is designing electric-car power systems, advanced car phones, and direct-broadcast TV technology

TRW'S SPACE & DEFENSE SECTOR Designs or helps set up air-traffic-control systems, airport security equipment, and tax-processing gear for the Internal Revenue Service. The company also is helping plan nuclear-waste disposal for the Energy Dept.

MARTIN MARIETTA Makes commercial aircraft components and mail-sorting systems for the Postal Service. It also manages computer systems for the Housing & Urban Development Dept. and research labs for the Energy Dept.

LOCKHEED Does contract maintenance for commercial airlines, handles the collection of parking fines for the city of Los Angeles, is designing small satellites for cellular phone networks, and plans to dismantle nuclear weapons

DATA: BW, COMPANY REPORTS

Nightmare Scenario #2

THE RUNAWAY CASH SUCKER.

Why didn't someone tell me this @\$!?!& network would cost so much?"

A lot of executives go pale when they see how much their computer networks are really costing them.

"What's with all this new pay-ment?" they ask. "I thought this thing was going to save us money."

Too late. They're strapped to a runaway cash sucker and heading downhill fast.

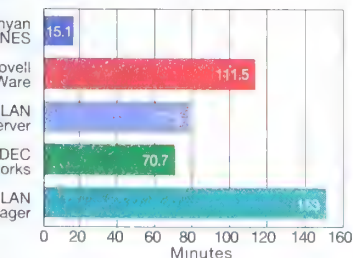
The fact is, the real economics of owning a computer network are never even mentioned by the people trying to sell you one.

And not knowing can cost a plenty.

Research proves Banyan more cost-effective than Novell, IBM, DEC and Microsoft.

Which brings us to the research report offered free on this page. It was compiled by the Business Research Group, and shows how

Time Required To Add A Network-Wide Service



Business Research Group/Newton, MA bc16D

For sheer cost effectiveness, Banyan surpasses everyone.

Banyan,® Novell,® IBM,® DEC,® and Microsoft® stack up against each other in cost of operation.

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Send for this impartial survey of network cost-efficiency. It's full of hard, actionable data.

Banyan won in all 11 categories. Often by astounding margins.

Whatever the job, administrators of Banyan VINES® networks were able to do them faster.

And faster translates into smaller staffs and lower cash outlays.

Banyan won across the board because our unique integrated architecture greatly simplifies administration. With Banyan VINES, cost-efficiency is built in from the beginning.

Computer networks are rapidly becoming indispensable to business. So understanding the true cost of networking is now critical.

The BRG report is a good place to start. This is a real-world report based on the testimony of actual network managers.

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17% of last year's total. Pericles Haleftiras, president of Structured Technology Corp., a small Connecticut military software and engineering company, says he now devotes 80% of his time to commercial sales. "When things are going well, you can be deluded into complacency," he says. "Not anymore."

Most defense companies still see Uncle Sam as their main customer, though. The nonmilitary government market is expanding as cost-conscious agencies farm out some work to private contractors. Beyond that, the Postal Service and Federal Aviation Administration are spending billions on new labor-saving equipment and systems upgrades. "There's very little difference between detecting a target in the Persian Gulf and in the airspace over New York City," contends Frederick F. Jenny, president of Unisys Corp.'s Paramax Systems unit. It has installed air traffic control gear at more than 200 airports.

NOSEDIVE. Still, adjusting to new markets is tough. Most contractors have trouble learning to do the extensive market research that commercial ventures require, instead of merely following the very specific directions the Pentagon gives them. Also, with so many contractors targeting the same markets for diversification, "the competition is severe," says William R. Evans, a vice-president at Delta Industries, a maker of jet fighter components. With the recession whacking commercial plane sales, for instance, Hughes took a \$40 million write-off in last year's third quarter on a new commercial flight-simulator business.

To ease the transition, New York, Connecticut, and Virginia have organized diversification programs that offer companies how-to workshops and financial aid. On Capitol Hill, Representative Thomas J. Downey (D-N.Y.) is preparing legislation to provide \$10 billion in federal loan guarantees for defense companies seeking to diversify, plus tax incentives for retooling and \$1 billion in matching grants to states. A trimmed-down version of the bill is likely to pass, despite Pentagon opposition.

Such measures aren't a cure-all. Despite its diversification drive, for instance, Westinghouse Electronic laid off 2,000 employees last year after the Pentagon canceled the Navy A-12 bomber, on which it was a subcontractor. "I don't see how we're going to avoid some pain," says Katherine Gillman, a senior associate at the Office of Technology Assessment. Still, if arms makers weren't working so hard on plowshares, the damage could be a lot worse.

By Amy Becker in Washington, with Lisa Schim in Los Angeles, Zachary S. Smith in Cleveland, Lisa Driscoll in New Orleans, and Joseph Weber in Philadelphia

Design

DESIGN TRENDS

WHAT WORKS FOR ONE WORKS FOR ALL

Old or young, disabled or able, universal design makes life easier

Patricia Moore grew up with her grandparents at home. She distinctly remembers when her grandmother had to stop cooking: Arthritis had made it impossible to hold a potato peeler, tear open a milk carton, or pry out the little spout on a salt box.

Moore remembers that she, too, had trouble using most of the same products. The rickety peelers were difficult

office equipment be usable by handicapped employees. The act is for manufacturers to consider how the design of their products affects and defines the handicapped in America.

Moore is responsible for developing the twin concepts behind the universal design approach. She trained as an industrial designer under pioneer designer Raymond Loewy in the early 1970s.

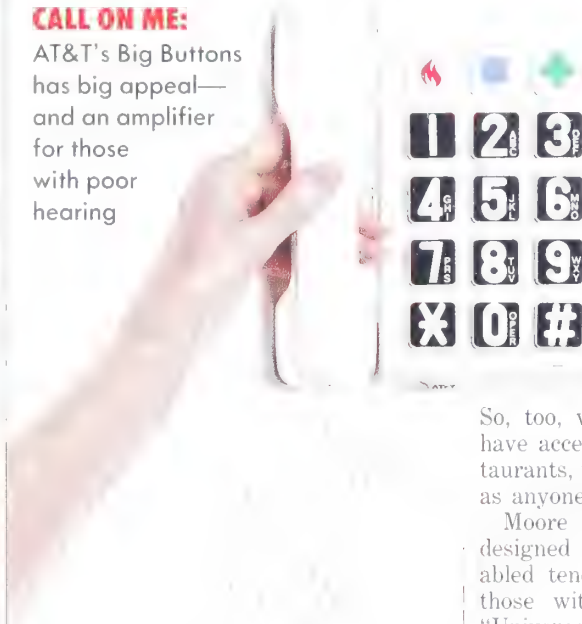
Moore went on to become a gerontologist. Moore began by studying concepts on their own and suggesting "disabilities" are socially defined by products and architecture, not age or health. In ergonomically designed utensils, Moore's grandmother would have been able to cook into her 80s. She would not have been "disabled" in the kitchen.

So, too, when wheelchair-bound people have access to offices, movies, and restaurants, they are as mobile and "able" as anyone else.

Moore also suggested that products designed to be easily used by the disabled tend to be more easily used by those with full abilities. The result: "Universal design allows businesses to widen the consumer market for all products," says Moore, who runs Moore Design Assn. in Phoenix.

Consider the lowly bathtub. The bathroom is the most dangerous room in the home, largely because so many accidents occur getting in and out of slippery tubs. This is not only true for the elderly, but also for children and adults. Kohler's new walk-in bathtub takes the danger out of bathing by installing a door into the tub. No more clambering over the rim. Open the door, sit down—either on a seat or at the bottom of the tub—then close the door. When the water is turned on, built-in sensors automatically turn on a pump that inflates a seal around the door and prevents any leaks. To drain

CALL ON ME:
AT&T's Big Buttons has big appeal—and an amplifier for those with poor hearing



to grasp, and opening those tiny metal spouts usually meant a mildly dangerous assault with a sharp weapon. Now, Moore, 39, is at the forefront of a movement called universal design. The principle is simple: Products designed to be easily used by disabled individuals also work better for the rest of us.

ILLEGAL OFFICES. Universal design is fast becoming the hottest approach in industrial design, thanks to Grandma, Grandpa—and the federal government. Signed in January, the Americans with Disabilities Act (ADA) aims to guarantee equal opportunity in employment, public accommodations, transportation, and telecommunications for people with disabilities. It requires that all electronic

, Kohler adapted a technology to seal the canopies in fighter

walk-in Precedence Bath is operational. "We want it for any older adults to younger children who doesn't feel secure stepping over the bathtub rim," says Todd Berg, who led Kohler's in-house team. Dannenberg designed the tub into the standard bath alcove, priced at \$2,600 for bath only, \$3,000 with a whirlpool.

FUN. A new line of kitchenware that Patricia Moore's grandmother would have loved is a perfect example of universal design. In fact, Sam Farber had a major hand in designing it. Years ago, Sam Farber, the remainder of high-end kitchenware company, started a new company, Smart Design International. He hired Smart Design Inc., a New York City design firm, to create knives, spoons, and, yes, peelers that could be used easily by anyone 5 to 95 years old. The key was in the handle.

ly when knives and spoons are wet. Monsanto Co.'s Santoprene thermoplastic fit the bill and was dishwasher-safe. Finally, adding a few fins for fun made people want to pick up and use the products. "Good Grips is a superb example of how a product can appeal to the broad general market and, at the same time, be ergonomically superior for elderly and disabled individuals," says Arnold Wasserman, dean of the Art & Design School at Pratt Institute in New York City. "It blows the idea that you have to have specialized and segregated design, with low production volumes that cost a lot of money, to accommodate the disabled and elderly.

WALK RIGHT IN:

A tub with a door from Kohler makes bathing less perilous



ated to make a universal handle that would fit on all the tools that everyone," says Tucker Viemeister, one of Smart Design's four partners. "That gave us a big market and made manufacturing and marketing cheaper." Viemeister's father, Read, helped design the famous Tucker car and named his son after the tough auto.

Viemeister consulted and came up with a two-part solution. By enlarging the base of the fin, it would improve leverage and spread the pressure over the palm, eliminating the finching a rubbery material instead of a slippery one would make gripping easier, especially

This is the whole point of universal design."

Procter & Gamble Co. is proving that point, too. Moore persuaded P&G to make its cardboard detergent box more convenient, especially for older people. "P&G recognized it's a real pain for everyone to open the box," she says. Moore helped design an easy-to-open plastic top that has been put on several P&G products, including the Tide Snap Top. "It's an elegant little solution to something that unnerves us all, not just the elderly," says Moore.



CHANGING TIDE:

An easy-to-open plastic top takes the frustration out of detergent boxes



GET A GRIP:

OXO's big-handle utensils are selling well in specialty and gourmet stores

The impact of ADA and universal design, however, may be felt most strongly in the office. Fortunately, many makers of office and telecommunications equipment have been on to universal design for years. Take American Telephone & Telegraph Co.'s Big Buttons telephone. It features large-size numbers for those with impaired sight or finger mobility, plus an earpiece that can pump up the volume for the hard-of-hearing. The large buttons match the functional abilities of small children, and the playful styling appeals to all ages. Another example is voice-activated phones. These were first produced for the disabled, who can't hit small buttons, but they also work for busy honchos, who can shout "Pittsburgh" while double-tasking and have their phone automatically dial their office in that city.

BIG SALES PAYOFF. Xerox Corp.'s new 5775 digital color copier is also universally designed. Its CRT display, which provides information on how to operate the machine, is mounted on an articulated arm that can be positioned for use by someone in a wheelchair. The 5775 also allows office workers to clear the path of jammed paper through a door in the front of the machine. This makes the copier easier to use not only for the wheelchair-bound, but for everyone.

For business, the big payoff from universal design is, of course, in sales. And if Good Grips is any indicator, companies are likely to profit by the approach. Priced at the high end of the kitchen-utensils market—\$5 to \$10 each—Good Grips products have been a great success in the Crate & Barrel chain, Williams-Sonoma, and Bloomingdales and in such stores as New York's Zabar's. So successful has it been for OXO that

Smart Design is just completing a less expensive line to be sold in discount stores. OXO's Farber hopes to knock off his own product before the foreign competition does.

By Bruce Nussbaum in New York

PINT-SIZE FUNDS THAT PACK A PUNCH

The FAM Value Fund, now in its sixth year, has delivered its shareholders above-average returns with below-average risks. In the first quarter, in which the average mutual fund only broke even, FAM Value was up 12.3%. But the \$21 million equity mutual fund is all but invisible. Fenimore Asset Management, which runs the fund out of the upstate burg of Cobleskill, N. Y., can't compete with the likes of Fidelity, Dreyfus, and Vanguard in promoting its fund. Nor does it have an army of brokers to speak for its virtues.

Without such marketing muscle, fund managers have a tough time reaching investors. That's because there are 2,300 stock and bond mutual funds alone, and hundreds more open every year.

Funds that soar to the top performers' list don't stay unknown for long. The Berger 100 Fund, for instance, had only \$15 million in assets at the end of 1990, but when it scored a spectacular 88.8% total return in 1991, the fund drew swarms of investors and now has \$322 million. But the sturdy funds that consistently run in the front of the pack without making the year's Top 10 can go for a long time without recognition.

ROOM FOR MORE. Buying an overlooked fund isn't like discovering a gem of a stock before Wall Street finds it. In that case, investors chasing a fixed number of shares can make the per-share price soar. But when investors pile into a mutual fund, the fund issues new shares. So the holdings of existing shareholders don't necessarily go up in price.

One virtue of these neglected funds is their size. A \$20

million fund can invest in a relatively illiquid stock with a \$50 million market capitalization. A \$500 million fund wouldn't even consider such an investment, since it wouldn't be able to buy enough stock to make an impact on the portfolio. "Smaller

which to spread fixed costs. FAM Value, Sit "New Beginning" Income & Growth, and Meridian funds, have higher than average expenses. Still, mutual-fund performance is reported after expenses, so what you see in the numbers is what has actually been earned.

FAM Value, for instance, was up 47.6% last year. The average growth and income fund rose 29.3%. And while the Sit fund only kept pace with the growth-and-income average last year, like FAM Value, it outdistanced its peer group over three- and five-year periods. The two take very different approaches to investing. FAM gravitates to smaller companies and rarely trades its stocks. The Sit fund keeps 20% of the portfolio in bonds—and puts the balance in large-cap growth stocks such as Home Depot, Merck, and Wal-Mart.

Likewise, Meridian Fund based in Larkspur, Calif., stands out among small-company funds. Portfolio manager Rick Aster has been at the helm since 1984, racking up an average annual total return of 16.4% for 1987 to 1991 vs. 13.9% for the average small-company fund. In 1991, Meridian was up 58%, an easy feat considering the average 25% of the portfolio was in cash. Still, Meridian has only \$18 million in assets.

SO FICKLE. Sometimes, the funds are ignored when their investment styles go out of fashion. Many asset-allocation funds, which try to minimize risk and maximize returns by shifting between stocks, bonds, and cash, have lived up to expectations, but that's not the case with the \$26.5 million MIMLIC Asset Allocation Fund. Now split evenly between stocks and bonds, the fund declined 4.1% in

GOOD PROSPECTS
OFTEN HOVER
BELOW THE TOP 10

funds are far more flexible in what they can do," says Ken Gregory, editor of *L/G No-Load Fund Analyst*.

The drawback of small funds is that they often have high expense ratios, since there are fewer assets over



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2.3% 16.8% 9.0%***
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**FPA NEW INCOME
CORPORATE-GENERAL**

1.2% 18.8% 11.1%
4.5%
800 421-4374

**MIMLIC ASSET
ALLOCATION
ASSET ALLOCATION**

-4.1% 27.7% 12.6%
5%
800 443-3677

**FAM VALUE
GROWTH/INCOME**

12.3% 47.6% 13.7%
5% (R)
800 932-3271

**MERIDIAN
SMALL COMPANY**

-0.5% 58.0% 16.4%
NO LOAD
800 446-6662

**HARBOR BOND
CORPORATE-GENERAL**

-0.9% 19.7% 13.7%***
NO LOAD
800 422-1050

**SIT
"NEW BEGINNING"
INCOME & GROWTH
GROWTH/INCOME**

-4.2% 29.4% 13.1%
NO LOAD
800 332-5580

***1989-91 R=DECLINING REDEMPTION FEE SOURCE: MORNINGSTAR INC., COMPANY REPORTS

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she says. Still, as with regular
funds, investors have access
to their money at any time.
Talk about out-of-favor in-
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to see why the \$11 million
Merger Fund is languishing.
It's the only mutual fund that
invests solely in takeover ar-
bitrage. Although deals are
fewer in number, says Fred
Green of Westchester Capital
Management, the fund's ad-
viser, "the quality of the deals
is much better and they're
more likely to be completed."
And while the Merger Fund is
classified as a maximum-
growth fund, adds Green,
"our goal is not to beat the
market but to earn a consis-
tent 12%-to-15% total return."
The three-year record is pal-
try, but last year, the fund
earned 16.8%, and in the first
quarter of this year, it was up
2.3%.
Even among the bond
funds, which are fewer in
number and far more homo-

geneous in their returns,
there are undiscovered trea-
sures. John Rekenhalter, edi-
tor of *Morningstar Mutual
Funds*, says the \$63 million
FPA New Income Fund
"would be a much, much larg-
er fund if its marketing was
as good as its portfolio man-
agement." Portfolio manager
Robert Rodriguez doesn't dis-
agree with that and says the
fund, which is sold by brokers
with a 4.5% load, will be get-
ting new marketing attention
in coming months.
HARBOR LIGHT. Unlike most
bond funds, which focus on
sectors such as intermediate-
term government bonds or
long-term munis, FPA New In-
come has a broad range. For
starters, the fund can move
its average maturity any-
where from 2 to 10 years. It
also has about 75% of the
portfolio in governments or
high-quality corporates and a
quarter in lesser-quality con-
vertibles and preferred stock.
That feature gives the fund

diversification that many
bond funds don't have. "A
stronger economy can push
interest rates higher, which
hurts government bonds," ex-
plains Rodriguez. "But better
business conditions raise the
value of the junk bonds."
While the average corporate-
bond fund was slightly down
in the first quarter, FPA New
Income was up 1.2%.
The Harbor Bond Fund,
with \$41.2 million in assets, is
also intriguing. Harbor Cap-
ital Management in Toledo dis-
tributes the fund, but the
portfolio is run by William
Gross of Pacific Investment
Management in Newport
Beach, Calif. Gross, one of
the best fixed-income manag-
ers in the country, runs Har-
bor Bond much like his own
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The two differ in one major
way: To open an account at
PIMIT you need \$500,000; for
Harbor Bond, it's \$2,000. That
alone makes the fund worth
knowing. *Jeff Laderman*

Electronics

TAKING CHAOS OUT OF REMOTE CONTROL

If your coffee table is piled high with remote-control units for the TV, VCR, CD player, cable box, and stereo, you might want to consolidate them with a single universal remote. These devices can operate as many as 16 pieces of equipment, and the latest pre-programmed models are relatively simple to use.

All you have to do to make them work is punch in a few numbers that correspond to the brand and model of your electronics gear. They're much easier to set up than older "learning remotes," which had to be "taught" by placing them head to head with the original remotes and pressing corresponding buttons. If your original was lost or broken, you were stuck.

The new universals vary in complexity. Audiovisual

freaks might go for the SC-2000 (\$129.95) from Infrared Research Labs. This high-end model, with a daunting array of keys, can operate eight audio and eight video components at a time. In addition to vital controls, such as volume and channel, it can adjust color, tint, contrast, bass, and treble.

SCREEN GEMS. Ordinary couch potatoes might be happier getting just the basics with "Big Button" (\$49.99) from Jasco Products or "Big Easy" (\$29.95) from Universal Electronics. Although they replace only four remotes—TV, VCR, cable box, and an auxiliary piece of equipment—both feature large, easy-to-identify buttons. For example, the stop button is shaped like an S, and the one for record is an R. "Big Easy" is due out on May 1, and "Big Button" will be available June 1. Or try the



COFFEE TABLE CLUTTER-CUTTERS

rudimentary Easy3 (\$24.99) from Gemini.

Other models of note include Jasco's "Quick-Set" (\$99.99), which lets you program your VCR on a liquid-crystal display (LCD) built into the remote device. Fox Electronics & Technology sells an

eight-in-one remote (\$99.95) with a touch-sensitive LCD switches to a different screen for each piece of equipment.

A drawback to some cheaper models is that they can't be upgraded to accommodate the codes of new components or brands not in the ready-programmed list. But that's not a problem if you want to keep your equipment for a while.

Also, some universals may lose their programming when the batteries are replaced. Gemini's remotes have "nonvolatile" chips that will retain information

without batteries, and Universal's include a lithium-battery backup. If your remote doesn't have that kind of protection, hang onto the instruction book: When the batteries wear out, you'll have to punch in the brand codes all over again. Pam D.

Smart Money

CMOs: ARE THE SOLID YIELDS WORTH THE UNCERTAINTIES?

ture and historical patterns of mortgage repayment.

The most volatile CMOs are the ones sold most often to individuals. Such "companion" or "support" CMOs act as shock absorbers for more

Interest-rate swings can delay payoffs—or bring them too fast

stable CMOs, called planned amortization classes (PACs), sold mostly to institutions. If interest rates fall, more mortgages are refinanced, and prepayments spike up.

PACs get a fixed amount, and any excess payments that could shorten maturities go to companion CMOs. But if rates rise and refinancings and home resales fall below projections, PACs get paid first. Companions get their coupon payment but may not get principal portions. That would extend the CMO's life.

The reward in yield is tempting. For example, five- and seven-year companion CMOs yield about 2% more than five- and seven-year Treasuries. Some say that makes the risk worthwhile. "There's nothing wrong with companion CMOs as long as investors realize that the maturity may be dramatically

different than what was presented initially," says George Guild, head of fixed income at Advest. "If someone doesn't care about maturity, it's a way to get high yield."

SEE-SAW. To see what interest-rate swings can do, consider a five-year companion CMO issued on Dec. 1, 1991, yielding 8.51%. If interest rates stay stable, investors get their last principal payment in 1997. But if interest rates go up two percentage points, they have to wait more years, until 2010. If rates go down two points, they'll be paid off in 1993.

If a CMO sounds tempting, ask your broker what will happen if interest rates spiked up or down. For a free guide to CMOs and other mortgage securities, write the Public Securities Association, Publications Dept., Broad St., New York, NY 10004. Suzanne Wood

Collateralized mortgage obligations (CMOs) have a strong appeal: above-average yields and, in many cases, a government-agency guarantee on interest and principal payments. But while credit risk is minimal, market risk can be substantial. Swings in interest rates can postpone the final payoff for more than a decade or greatly shorten maturities. And if you pay above par and sell before maturity, you're likely to face a loss.

CMOs are created when an investment firm buys a pool of residential mortgages. With that pool as collateral, analysts create many different CMO securities, called *tranches* (French for "slices"), each with a unique claim on the projected interest and principal streams from the underlying mortgages. Each *tranche* has a different yield and stated maturity, based on its struc-



If it had less legroom, a lesser warranty, and cost thousands more, it could be a Cadillac.

Logic would seem to dictate that when you pay thousands of dollars more for a car, you should get a lot more car. Apparently, in the case of the Cadillac Sedan DeVille versus the Chrysler Fifth Avenue, logic does not apply. Both cars provide ample room for six, air-conditioning, automatic transmission, automatic load leveling, stereo sound system, fully reclining seats, all as standard equipment. Both offer safety and performance. A driver's air bag is standard on the Chrysler Fifth Avenue, as is a powerful fuel-injected, 3.3-liter V-6. Anti-lock brakes are also available. Here, however, is where logic totally



falls apart. The restyled Chrysler Fifth Avenue costs thousands less, yet it has more rear legroom than the largest Cadillac*. And it offers a better warranty: bumper-to-bumper

protection for 5 years or 50,000 miles†. So if you're looking for a great luxury car, defy logic. Pay less, get more. Chrysler Fifth Avenue. For more information, call 1-800-4A-CHRYSLER.

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Leisure

TENNIS CAMP: IT'S YOUR ADVANTAGE

Maybe you've got a wobbly backhand. Maybe your tennis is always a notch or two below your opponent's. Or maybe you're a beginner, caught between enthusiasm for a great sport and frustration over how long it takes to learn.

Falling into all three categories (and others), I was a prime candidate for remedial help at an adult tennis camp. But this was a vacation—I didn't want to rough it. John Gardiner's Tennis Ranch in Scottsdale, Ariz.—reputedly one of the best places to get both expert tennis instruction and four-star accommodations—seemed the place to go. Tennis magazines rate it an ace, and the *Zagat U.S. Hotel Survey* ranks it among the top resorts in the West.

For \$1,950—comparable to other fancy tennis camps (table)—I sampled life along High Lob Avenue and Follow Thru Lane in an all-inclusive "tennis clinic week." The package promised a chance to whack 6,000 or so balls during six days of 3½-hour lesson sessions, all the court time I wanted, and a couple of massages to boot.

DESERT CHARM. Set in the shadows of Camelback Mountain, the ranch lived up to its billing. The *casita* rooms were big and comfortable—suites, really. The Continental food was excellent and plentiful. The wine flowed freely during dinner. Each morning, a carafe of fresh orange juice and a newspaper appeared at the door. And the ranch exuded natural charm: adobe-colored earth, orange-laden trees, and stars that seemed within reach. As for the 24 hard



SERVING UP THE BASICS: WHACKING 1,000 BALLS A DAY IS SURE TO YIELD RESULTS

courts, well, there was no way to blame a bad bounce on their perfect condition.

The clinic began Monday at 9 a.m. ("Whites," once *de rigueur*, weren't necessary, but tennis attire was.) First up: dividing into groups, with no

We beginners started with the serve—a review of such basics as foot placement, grip, toss, and swing. Then we practiced, getting individual help. After 45 minutes, we moved to a different court and pro for drills and instruction on ground strokes. From there, to volleys. Then, a doubles strategy session. Last, each player selected an area to work on—return of serve, say.

At 12:30, it was lunch—or, for diehards, a free 30 minutes with ball machines (otherwise \$9 per half-hour).

Although lessons were tailored to abilities, each group underwent the same routine each day. Virtually every shot was covered—lobs, overheads, half-volleys—and strategy got more involved daily.

By Tuesday afternoon, though, my cohorts and I decided we wanted more basics and less strategy. A word with management was enough to change our program. Emboldened, I later asked for even more help with mechanics—and for two days, I was treated to one-on-one lessons. One session was particularly worthwhile: With a slight grip change, my backhand improved enormously.

For those noted by morning play, the pros arranged a round in tournament Monday and Tuesday afternoons. At any time, you could play or practice on the courts, get individual lessons (per hour), or with a pro (\$). You could also tape to see your play videotaped to see deficiencies.

Is tennis worth it? For me, definitely. I put several tips into practice, and the number of hours spent hitting a ball helped develop

muscle memory. The best players in my group occurred: One surgeon, came because he just beat his regular partner, sure he would now win his down. An advanced player also saw improvement. There were some complaints a few of the pros were descending, for example—one regretted coming. Many said they'd be back.

The week was a real vacation: fun and interesting. Muscles weren't sore, and I had energy left over for runs, which the bountiful demanded. *Judy Dobrzynski*

Worth Noting

■ **ENABLING.** If your company isn't equipped to accommodate disabled people, see *People with Disabilities: Plain It All for You* (\$19.95, Avocado Press, Louisville, Ky.). This guidebook explains businesses how to comply with the Americans with Disabilities Act, which will be phased in by July.

■ **AUCTION ACTION.** IRS auctions offer sweeter deals than sales by Resolution Trust Corporation, the Drug Enforcement Administration. That's one from *The Official Government Auction Guide* by George Chelekis, due out in June (\$25, Crown).

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more than four players to a pro. We rated ourselves, going to courts designated for beginners, intermediates, and so on—where pros checked our judgment with drills. Most of us—a range of executives, doctors, a lawyer, a retired couple, and housewives—judged correctly. There were just two other beginners. Many, in fact, had been to tennis camp before.



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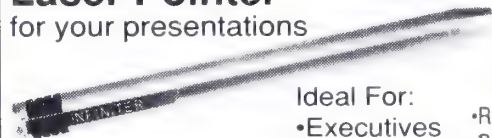
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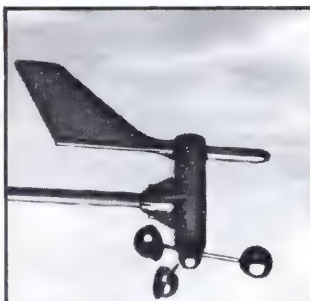
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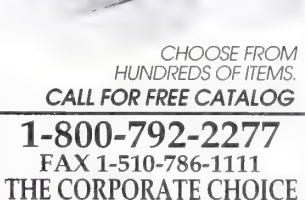
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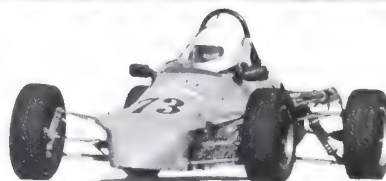
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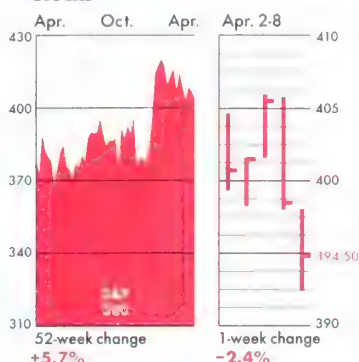
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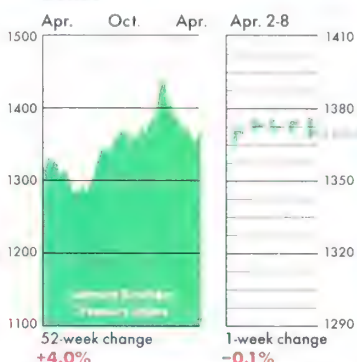
Investment Figures of the Week

RY
The week was set in
the Nikkei stock index fell
6, as Japanese in-
d to worsening eco-
The malaise spread to
where the Dow Jones in-
ge fell 62 points on
other 32 points on
capitalization, high-
and over-the-counter
specially hard-hit. Not
mutual funds investing
stocks and biotechnolo-
g the worst perform-
banking shares led the

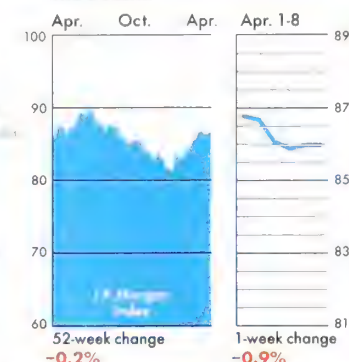
STOCKS



BONDS



THE DOLLAR



STOCK ANALYSIS

	Latest	% change Week	% change 52-week
INDUSTRIALS	3181.4	-2.1	10.7
INDUSTRIALS (Russell 1000)	208.9	-2.6	6.9
TECHNOLOGICALS (Russell 2000)	193.1	-4.6	11.5
TECHNOLOGICALS (Russell 3000)	222.9	-2.8	7.2

	Latest	% change (local currency) Week	% change (local currency) 52-week
FINANCIAL TIMES 100	2393.2	-0.6	-5.0
NIKKEI INDEX	17,175.5	-7.6	-34.6
COMPOSITE	3318.1	-2.7	-5.0

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.95%	4.11%	5.8%
30-YEAR TREASURY BOND YIELD	7.92%	7.90%	8.3%
S&P 500 DIVIDEND YIELD	3.19%	3.02%	3.4%
S&P 500 PRICE/EARNINGS RATIO	24.3	25.2	17.3

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	400.5	399.7	Negative
Stocks above 26-week moving average	50.6%	58.0%	Negative
Speculative sentiment: Put/call ratio	0.45	0.44	Positive
Insider sentiment: Vickers sell/buy ratio	3.02	3.10	Negative

STOCK GROUPS

	4-week	52-week
LEADERS		
TELECOMMUNICATIONS	7.1	18.8
HOUSING	6.3	35.6
INDUSTRIATION	5.0	52.1
TECHNOLOGICALS	4.9	60.0
INDUSTRIALS	4.6	13.8
LAGGARDS		
TECHNOLOGICALS	-12.9	23.1
HOUSING	-12.4	-20.8
INDUSTRIATION	-12.0	38.6
TELECOMMUNICATIONS	-11.7	29.1
INDUSTRIALS	-11.6	-4.0

Strongest stock in group

	4-week	52-week	Price
AT&T	10.9	23.5	42
FLEETWOOD ENTERPRISES	6.6	46.1	42 3/8
TEKTRONIX	7.2	-24.5	18 1/2
MATTEL	8.7	67.7	34 3/8
FORD MOTOR	7.5	26.6	39 1/4

Weakest stock in group

	4-week	52-week	Price
PAINWEBBER GROUP	-19.1	18.8	19
HOMESTAKE MINING	-23.0	-26.0	11 3/4
KAUFMAN & BROAD HOME	-18.6	13.3	17
FEDERAL EXPRESS	-18.2	22.6	42 3/4
DELTA AIR LINES	-14.2	-14.8	58 7/8

MUTUAL FUNDS

	%	LAGGARDS	%
Four-week total return		Four-week total return	
SELECT AUTOMOTIVE	3.2	DFA JAPANESE SMALL COMPANY	-16.0
AMERICA GROWTH	2.6	OPPENHEIMER GLOBAL BIO-TECH	-15.8
MENTAL SMALL COMPANY	1.9	NIKKEI JAPAN TILT	-14.1
52-week total return		52-week total return	
REGIONAL BANK B	51.4	NIKKEI JAPAN TILT	-36.3
HERITAGE	48.4	STRATEGIC GOLD/MINERALS	-36.0
SELECT AUTOMOTIVE	47.8	DFA JAPANESE SMALL COMPANY	-34.3



RELATIVE PORTFOLIOS

	Treasury bonds	U. S. stocks	Money market fund	Gold	Foreign stocks
Value	\$11,255	\$10,991	\$10,447	\$9,365	\$9,267
% change	+0.85%	-1.39%	+0.07%	-0.99%	-3.94%

page are as of market close Wednesday, Apr. 8, 1992, unless otherwise indicated
include S&P 500 companies only; performance and share prices are as of market close

Apr. 7. Mutual fund returns are as of Apr. 3. Relative portfolios are valued as of Apr. 7. A more detailed
explanation of this page is available on request

BOARDS SHOULD GET THEIR HANDS DIRTY

The startling boardroom revolt at General Motors Corp. has to be stirring up mixed emotions in Corporate America. While many executives must be feeling empathy for CEO Robert C. Stempel, some also say they're pleased that independent directors took corrective action at the flailing auto company. The board's action, they argue, proves that the corporate-governance system works. Therefore, there's no need for the changes that many academics, shareholder activists, and government officials want.

Not so fast. While GM's directors deserve credit—disciplining a colleague is never easy—it must be asked why they waited so long to fix problems that have been apparent for years (page 30). Their failure to act sooner merely points up the key problem with America's boards: Almost always, they must be driven to action by outside pressure.

The board's example may encourage other directors to exercise their independence of mind. Here are a few more suggestions to improve the governance process: A board chairman who does not also serve as CEO would clearly help. Independent directors should be encouraged to choose a leader, a "senior director" perhaps, who would convene the outsiders at least once a year to discuss the CEO's performance and other sensitive issues. And, if major shareholders have beefs, directors should be willing to meet with them.

The proxy system needs the reforms the Securities & Exchange Commission is now considering. For example, shareholders should be allowed to communicate among themselves—which the law now proscribes—so long as they are not engaged in a contest for control. The rules governing the nomination and election of directors should also be changed to allow easier shareholder participation in the process. And confidential voting of proxies should be mandated.

Such measures would encourage directors to act boldly long before companies are on the brink of ruin. They would also prevent such actions from becoming a messy public spectacle.

DON'T DERAIL THE S&L BAILOUT

The House of Representatives' decision to let the Resolution Trust Corp.'s spending authority lapse on Apr. 1 showed just how much of a political leper the three-year-old agency has become. Its reputation is undeserved. The blame for the soaring cost of the thrift industry cleanup doesn't lie with an organization created long after the Reagan Administration and Congress sired the savings and loan mess and failed to deal with it.

In fact, the RTC's record exceeds just about anyone's expectations (page 100). It was saddled with a monumental task and conflicting missions. From its first day, it had billions of dollars of assets to sell in depressed markets. Law-

makers wanted the agency to unload the real estate quickly—without cutting prices and without dumping them so fast that already soft markets would plunge even further.

That the RTC has walked this tightrope so well is an achievement. The agency has closed 644 thrifts, taken \$360 billion in assets, and sold off two-thirds of them. Its sales force has become more free-market-oriented and more creative. It offers deep discounts when appropriate, sells securities backed by pools of commercial real estate mortgages, and bundles good and bad properties to make bad dogs more attractive. All this serves taxpayers well.

Of course, there has been bureaucratic bungling and some hints of scandal—small potatoes by Washington standards. But that was predictable, given the RTC's gargantuan task. For the taxpayers' sake, the agency should be allowed to continue its work. Let the RTC spend the \$17 billion already authorized and give it the additional \$25 billion it needs. The agency is finally on the right track. Delaying its efforts could cost even more in the long run.

THE RUBLE FUND NEEDS GROUND RULES—FAST

It's good news that the world's leading industrial nations are backing a proposed \$6 billion fund to help stabilize the ruble in the former Soviet Union. Westerners have been urging such a move for months, and the fund is to be the most crucial component of a \$24 billion aid package. It's important to hasten it into place by mid-1992 as planned. Russian President Boris Yeltsin is under heavy parliamentary attack for his tough but necessary reforms while Russia and other former republics are poised for severe economic depression (page 47). If the fund works, it will restore confidence in the sagging currency, buttressing a fragile support for reform. In the long term, it will enhance trade prospects by pushing the ruble closer to convertibility with other currencies.

Still, the devil is in the details, and many haven't been worked out. For example: Who will actually administer the fund? One possibility is the Bank for International Settlements, according to Jacques Attali, president of the European Bank for Reconstruction & Development. Nor is it known what currencies will make up the fund or whether it will apply only to Russian transactions. Other republics, such as Ukraine, are planning to introduce their own currencies.

The most critical aspect is Yeltsin's ability to maintain a tight monetary policy and avoid printing new rubles just to keep dying industries afloat. If that happens, the fund could dry up in a matter of weeks. That's why it's vital that the fund be conditional on agreed-upon monetary growth targets. And as time passes, Yeltsin will be under increasing pressure to provide unemployment benefits as millions are laid off during Russia's difficult industrial restructuring. Still, there are precedents for successful application of such funds. Poland used a similar one worth \$1 billion to prop up the zloty in 1990. So far, it hasn't expended a penny from the fund, despite tremendous pressure to use the money to ease the pain of systemic economic change.

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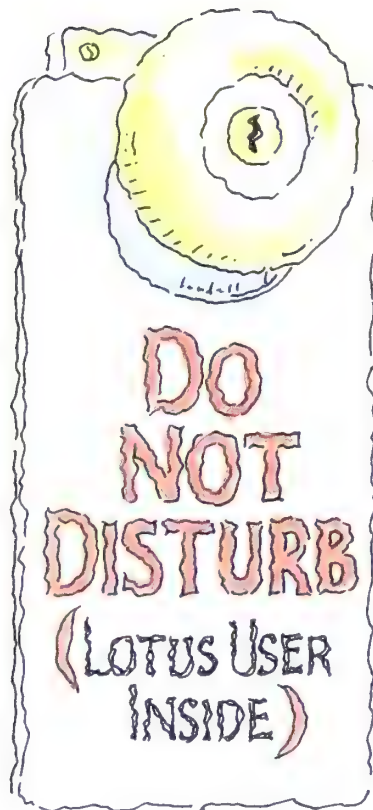
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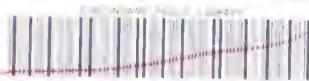
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BusinessWeek



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The stock market has collapsed.
Banks are in trouble. Recession looms.

JAPAN

Will it lose
its competitive
edge?

PAGE 50

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services, we can bring you along at the pace that suits you. Our health care options include everything from traditional indemnity plans and preferred provider networks to HMOs and plans that integrate our HMO and indemnity options. And each one offers you successively higher levels of cost controls. So, how do we get your employees on board? The key is flexibility and freedom of choice. And making sure that quality is not compromised. Recently, for example, 94% of the members enrolled in our healthplan rated their physicians highly. Not a bad barometer of employee satisfaction. With our integrated health care programs, your employees can receive medical care from physicians within an HMO network or select physicians from outside the network. Giving them access to the best features of both HMO and traditional indemnity insurance coverage. What's in it for you? Combining choice and the kind of health care management we're talking about helps you rein in runaway costs, giving you greater administrative convenience and efficiency. How committed are we? So committed we have created one of the most extensive health care networks in the country. Serving 75% of the nation's markets and over 2 million people. So committed we've created the nation's leading provider of employee life and health benefits. So committed we can help you in everything from health and dental insurance to life and disability plans, too. Call CIGNA Employee Benefits for companies, 1-800-782-0782. And we'll show you how to find what every company is looking for. Our rightful share of \$30 billion.

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TAKING STOCK: THE SHARP DECLINE OF THE NIKKEI AVERAGE IS SENDING SHOCK WAVES RIPPLING THROUGH THE JAPANESE ECONOMY

Cover Story

50 A NEW ERA FOR JAPAN

The plunge of the Tokyo stock market wiped out \$2.6 trillion in capital and put the 'miracle economy' into recession. Companies are cutting back across the board as managers discover that money has a cost. Japan is hardly down and out, but the bubble of the 1980s has burst, and the country will have to change yet again to hold on to its global competitive edge

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The Corporation

UNITED'S GLOBAL SKIES

Its foreign push is rich in potential—but also very risky

A LOT OF HELP FROM HIS FRIENDS

UAL's Wolf never makes a move without his trusted inner circle

HOVNANIAN'S STURDY HOUSE

The builder weathered the slump and is now eyeing new markets

Marketing

CIRCUIT CITY SIZZLES

A slick computerized inventory system helps keep the consumer electronics chain healthy

Finance

HAVE ROLODEX, WILL TRAVEL

Insider Jim Wolfensohn goes to bat for the Reichmanns

TOO BIG TO SINK?

Developer O&Y's hard-line bargaining with lenders may pay off

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Its issue of 50-year bonds shows unexpected faith in the long term

A RARE COMMODITY

Mining company Freeport-McMoRan keeps on conjuring up miracles

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Boeing is on the runway
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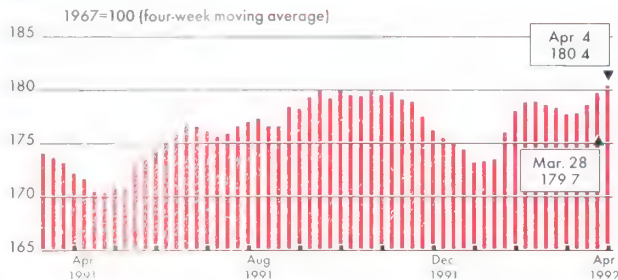
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Japan's chance for needed reform
Major's win: Good for the EC?
Bringing sanity to air fares

BusinessWeek Index

PRODUCTION

Change from last week: 0.4%
Change from last year: 4.8%

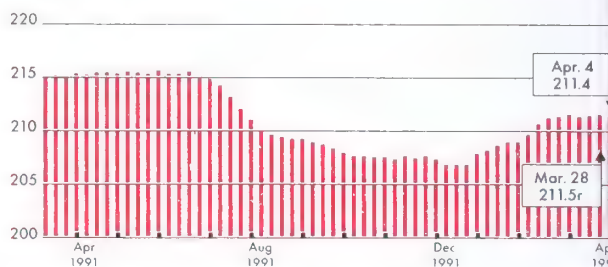


The production index rose slightly during the week ended Apr. 4: It may be breaking out of a two-month pattern of no growth. On a seasonally adjusted basis, output of steel, crude-oil refining, paperboard, paper, and lumber all increased. Rail-freight traffic, autos, trucks, electric power, and coal production all posted declines. As a result, before calculation of the four-week moving average, the index dropped to 179.3, from 182.0.

BW production index copyright 1992 by McGraw Hill Inc.

LEADING

Change from last week: 0.0%
Change from last year: -1.8%



The leading index was virtually flat during the week ended Apr. 4, sending a new signal about the economy's future. Continued improvement in materials price plus a gain in the growth rate of real estate loans offset falling stock prices, an increase in the number of business failures, and slower M2 growth. Bond yields were unchanged from the previous week. Before calculation of the four-week moving average, the index increased to 211.3, from 211 in the preceding week.

Leading index copyright 1992 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (4/11) thous. of net tons	1,805	1,828#	12.7
AUTOS (4/11) units	117,998	105,821r#	19.6
TRUCKS (4/11) units	82,691	83,632r#	34.8
ELECTRIC POWER (4/11) millions of kilowatt-hours	50,871	52,163#	0.1
CRUDE-OIL REFINING (4/11) thous. of bbl./day	13,293	13,266#	1.8
COAL (4/4) thous. of net tons	17,382#	19,224	-6.7
PAPERBOARD (4/4) thous. of tons	793.1#	783.8r	9.0
PAPER (4/4) thous. of tons	772.0#	773.0r	4.0
LUMBER (4/4) millions of ft.	503.2#	508.2	3.4
RAIL FREIGHT (4/4) billions of ton-miles	19.9#	21.2	7.6

Sources: American Iron & Steel Institute, Ward's Automotive Reports, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA, SFPA, Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (4/15)	133	132	138
GERMAN MARK (4/15)	1.65	1.63	1.72
BRITISH POUND (4/15)	1.76	1.75	1.74
FRENCH FRANC (4/15)	5.59	5.51	5.81
CANADIAN DOLLAR (4/15)	1.18	1.19	1.16
SWISS FRANC (4/15)	1.52	1.49	1.46
MEXICAN PESO (4/15)	3,047	3,044	2,989

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars.

PRICES

	Latest week	Week ago	% Change year ago
GOLD (4/15) \$/troy oz.	338.950	337.500	-6.0
STEEL SCRAP (4/14) #1 heavy, \$/ton	94.00	92.00	-6.5
FOODSTUFFS (4/13) index, 1967=100	200.6	201.9	4.0
COPPER (4/11) c/lb.	105.9	106.7	-6.0
ALUMINUM (4/11) c/lb.	62.0	60.5	-4.8
WHEAT (4/11) #2 hard, \$/bu.	4.14	4.23	38.9
COTTON (4/11) strict low middling 1-1/16 in., c/lb.	55.09	54.99	-32.2

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (4/10) S&P 500	400.60	402.59	6.0
CORPORATE BOND YIELD, Aaa (4/10)	8.32%	8.35%	-6.0
INDUSTRIAL MATERIALS PRICES (4/10)	97.2	97.2	1.0
BUSINESS FAILURES (4/3)	453	450	22.0
REAL ESTATE LOANS (4/1) billions	\$400.6	\$400.3	2.0
MONEY SUPPLY, M2 (3/30) billions	\$3,456.1	\$3,458.5r	2.0
INITIAL CLAIMS, UNEMPLOYMENT (3/28) thous	432	456	8.0

Sources: Standard & Poor's, Moody's, Journal of Commerce (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBC seasonally adjusted data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
INDUSTRIAL PRODUCTION (Mar.) total index	107.2	106.9r	2.0
CAPACITY UTILIZATION (Mar.)	78.1%	78.0%r	0.0
CONSUMER PRICE INDEX (Mar.)	139.3	138.6	3.0
PRODUCER PRICE INDEX (Mar.) finished goods	122.3	122.0	0.0

Sources: Federal Reserve Board, BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (3/30)	\$935.5	\$938.4r	9.0
BANKS' BUSINESS LOANS (4/1)	290.1	289.2r	10.0
FREE RESERVES (4/1)	1,510r	423r	22.0
NONFINANCIAL COMMERCIAL PAPER (4/1)	138.3	140.0	-7.0

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	% Change year ago
FEDERAL FUNDS (4/14)	3.68%	3.92%	5.6%
PRIME (4/15)	6.50	6.50	9.00
COMMERCIAL PAPER 3-MONTH (4/14)	3.95	4.18	6.02
CERTIFICATES OF DEPOSIT 3-MONTH (4/15)	3.93	4.08	6.00
EURODOLLAR 3-MONTH (4/11)	4.10	4.21	6.02

Sources: Federal Reserve Board, First Boston

*Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment. #Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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our members.



How we look to our bankers.

lay, in a world grown less
g and more competitive, a lot
esses seem to be groping for
illets. Secrets to success.
here they are.
e really good service. And put
oney in a safe place.
east, that's what works for us.
when our members think of
oss of California, they have a

vision of a person at the other end of
the phone who is very well trained,
responsive, and competent.

Someone to call when they need
answers. Our bankers, however, have
a different picture.

They just see the largest health
insurer in California. A company with
absolutely no debt. A company with
\$1.2 billion in assets.

And since most of those assets are
in cash and prudent long-term invest-
ments (as opposed to junk bonds and
desert resorts), it
makes those bankers
feel very secure.

Which, come to
think of it, is the
same way we make
our members feel.



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We've expanded our successful partnership with WeTip, the national crime-fighting organization, using an exclusive hotline

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To help our policyholders and their employees recognize and combat fraud, we've launched a program that spells out the law, its penalties and how to call WeTip anonymously. And we've also strengthened our contacts with state law enforcement agencies and district attorneys to help prosecute fraud.

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WHY 'DETROIT SOUTH' ISN'T LIKELY TO LIFT THE NORTH

As suggested in "Detroit South" (Cover Story, Mar. 16), conventional economic wisdom says that the shift in North American auto production from U.S. factories to sites in Mexico should result in a "win-win" situation for both countries. In theory, Mexicans will use their newfound wealth to buy American products, thereby creating new jobs.

Let's we apply this free-trade balm too hastily, we should revisit a bit of economic wisdom, hard-learned in the 1980s: In an era of intense global competitiveness, the notion of any one country being a "natural supplier" to another rings hollow. By itself, the mere geographic proximity of a supplier to a burgeoning market offers only a fleeting competitive advantage. In the long haul, international and domestic markets alike are won by virtue of customer awareness, product features, distribution channels, brand recognition, price, and, of course, quality.

If U.S. companies are to cash in on the lucrative Mexican market, they will have to do it the new-fashioned way—by slugging it out in the trenches with the same Japanese, Korean, and German competitors who have already dug strong toeholds in the North American market. The question is: Are we up for the fight?

Joseph O'Grady
Burlington, Vt.

Your article left me with a sense of fear for the future economic vitality of America. The argument presented in the article that free trade with Mexico will create new jobs in America is seriously flawed, based on the false assumption that a rise in Mexican auto-manufacturing operations will significantly boost demand for U.S.-made auto parts.

In the same article, you indicate that Electro-Wire Products and other auto-parts suppliers in Owosso, Mich., have transplanted 58% of their jobs to Mexico. Service industries do not provide a viable replacement for manufacturing industries, counter to what Owosso's city manager seems to believe.

Your article also cites arguments that Mexicans, prosperous from their new manufacturing jobs, will buy more U.S.-made products. Unfortunately, by the time that would happen, there would be few products still made in the U.S. that Mexicans could afford.

David Wolpert
Pittsburgh

When I entered the employment market in the early 1950s as an industrial engineer, the New York area was populated by thousands of manufacturing companies employing over a million marginally skilled workers. Most product manufacturing—apparel, electronics, toys, etc.—has since been moved to foreign countries with lower labor costs. Apparently, assumptions that better jobs would replace those exported and that displaced workers could easily be retrained to fill them have not proven correct. To continue down this path is another example of the failure of American leadership.

Mel Cook
Suffern, N. Y.

TWO VIEWS ON BUMBLING BANKERS

In John Meehan's otherwise first-rate commentary "America's stumbling bankers: Ripe for a new fiasco" (Finance, Mar. 2), he omitted one of the important contributions that will lead to the next fiasco: The inability of bank CEOs and directors to "Just say no," in this case to security analysts and the business press. In the '70s and '80s, a principal "measurement" of management was how aggressively it would jump into all the now-acknowledged diversifications-of-the-month follies. Failure to do so meant a low stock price and hence, a prime takeover candidate.

This institutional pressure to conform is enormous. If you take the two generally acknowledged best-managed banking companies, Fifth Third and Wachovia, they share one common trait: an absolute disdain for the way anyone but their employees and their customers thinks they should be managed. The Citicorps, the Banks of New England, and the Security Pacifics were the ones the

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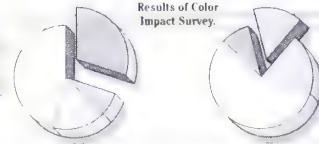
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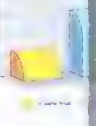
The movie industry was born and
raised in black & white. And many
would say that the greatest moments
in film came before or during the
colorless, full-on medium.
Without color, the impact of the
visual arts & white film came
from dramatic cinematography
requiring storytelling and acting

Results of Color
Impact Survey



	Color is important	Color is not important	Color is a necessary part of the industry	Color is not a necessary part of the industry
Overall	70%	30%	80%	20%
Male	72%	28%	82%	18%
Female	68%	32%	78%	22%
Age 18-34	75%	25%	85%	15%
Age 35-44	65%	35%	75%	25%
Age 45-54	60%	40%	70%	30%
Age 55+	55%	45%	65%	35%

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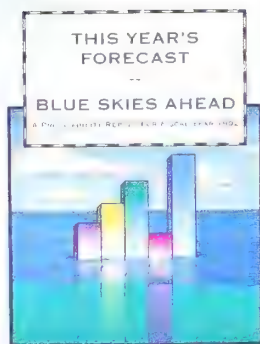
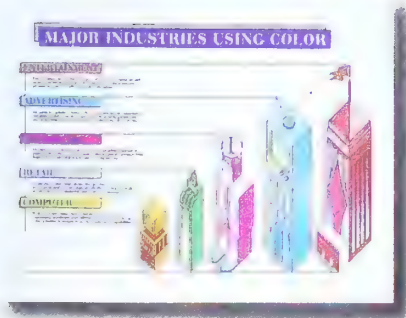
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Readers Report

institutional investors—and the important business press—loved.

Thomas S. Condit
Washington

You point out that very few CEOs have lost their jobs due to poor performance. To take this one step further, I would like to point out that as banks and thrifts fail and are closed or merged with other banks, the same CEOs and other officers responsible for the failed institutions are often hired by the Resolution Trust Corp. to assist in managing other failing financial institutions.

The industry's leaders, along with government help, should assure another banking debacle as seen in the 1980s.

Cindy Weatherly
Houston

ETHICS PROGRAMS ARE NO SUBSTITUTE FOR THE REAL THING

After reading "The best-laid ethics programs..." (The Corporation, Mar. 9), it's not hard to figure out why Dow Corning's state-of-the-art ethics program didn't work in the case of breast implants. Layering in a bureaucracy is no substitute for a true corpo-

rate culture. Workers have a genius for discovering the real reason for a system and learn quickly how to satisfy its minimum requirements.

Turning ethics into a buzzword or elaborate structure won't guarantee integrity. The best way is the simplest. If the boss truly believes that honesty and respect for the customers are priorities comparable to growth and profits, employees will follow the lead.

Paul Wesslund
Kensington, Md.

HOW CAN NEW YORK HAVE SO MANY JOBLESS? IT CAN'T

In "They're pounding the sidewalks of New York" (Economic Trends, Mar. 30), the information cited by economist Philip Braverman is quite erroneous. He states that according to the Labor Dept.'s household survey, the nation lost 748,000 jobs, and New York accounted for 43% of these. The national employment estimates are developed by the Labor Dept.'s Bureau of Labor Statistics, while state estimates are developed independently by each individual state employment-security agency. State estimates are not controlled to a national

total—or vice versa. The sum of all the states' employment losses would far exceed those at the national level.

Michael Levin
Economist
Bureau of Labor Statistics
U.S. Labor Dept.
Philadelphia

TAKE AWAY LATE FEES, AND ALL CREDIT-CARD HOLDERS WILL PAY

The article "Mad as hell about late fees" (Top of the News, Feb. 24) accurately describes the rising tide of litigation surrounding the right of credit card issuers to charge fees for late payments. Missing from the story, however, was an explanation of why issuers charge late fees in the first place and what the consequences would be to average consumers if issuers' right to charge late fees is taken away by legislative or judicial fiat.

In general terms, a late payment is an early warning that something has changed in the financial life of certain cardholders, and that makes them riskier customers.

Therefore, late fees reflect the fact that, on average, unsecured lending

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paying customers is predictably
er than lending to a group of cus-
ers who pay on time.
hen issuers charge late-payment
s they accurately allocate the added
s of lending to late-paying card-
ers directly to those cardholders
generate these costs.
government or the courts eliminate
fees, issuers would be forced to
ad these costs over their entire card-
er base, thereby asking customers
pay on time to shoulder the burden
ted by those who don't.

Alex W. Hart
President & CEO
MasterCard International
New York

D PERSPECTIVES ON CO'S FUSSY STANDARDS

ne article "Geico's acceleration is no
accident" (The Corporation, Mar. 30)
erly focuses on the importance of
d drivers to Geico.
Unfortunately, some readers may con-
e that Geico will cancel them if they
e an accident. When we faced finan-
troubles in 1976-77, we did have a
e percentage of cancellations and
renewals.
nce then, in comparison with other

companies, we have had one of the high-
est percentages of auto policyholders
who renew year after year.

Today, we terminate only 1.5% or less
of our policyholders each year for any
reason. But it is true we can be fairly
unforgiving for those who drive while
intoxicated or are found guilty of reck-
less driving.

William B. Snyder
Chairman & CEO
Geico Corp.
Washington

Geico provides low-cost insurance by
focusing its efforts on "safe driv-
ers" and by being "unforgiving" toward
their poorer drivers. They also are in-
creasing profits by, in my opinion, mak-
ing it very difficult for claimants to col-
lect damages from them.

My car was struck, while parked, by a
driver insured by Geico. The adjuster at
its claim office wrote me an estimate for
approximately \$800, which seemed quite
low for the damages. I obtained three
other estimates, and they ranged from
\$2,100 to \$2,400.

Not until I threatened to complain to
the insurance commissioner was I able
to have my car repaired.

Mark J. Martella
San Jose, Calif.

PLEASE INSERT THIS BETWEEN INTEL AND MOTOROLA: AMD

Your article on microprocessor ven-
dors, "The reward of many RISCs"
(Information Processing, Mar. 30), is cor-
rect in naming Intel the industry's No. 1
supplier of microprocessors for comput-
ers. However, your chart showing Mo-
torola as the No. 2 supplier, with just
more than 3 million microprocessors for
computers shipped last year, is well off
the mark. In fact, Advanced Micro De-
vices Inc. is easily the second-leading
manufacturer of microprocessors for
computers, with more than 5 million
units sold in 1991. This year, the gap
between Intel's No. 1 position and AMD's
second-place rank will get smaller, while
the gap between AMD and Motorola will
widen as our Am386 microprocessor
family continues to gain market share.

Robert G. McConnell, Vice-President
Personal-Computer Products Div.
Advanced Micro Devices Inc.
Austin, Tex.

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corporate jet.

It appears that the company mail cart has quietly become a vehicle of runaway abuse.

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THE CHAIRMAN: JOHN J. McCLOY; THE MAKING OF THE AMERICAN ESTABLISHMENT

By Kai Bird

Simon & Schuster • 800pp • \$30

THE KINGPIN OF THE POWER ELITE

For those who need reminding or are too young to know, John J. McCloy was chairman of Chase Manhattan Bank; president of the World Bank; Assistant Secretary of War; U.S. High Commissioner for Occupied Germany; an eminent Wall Street lawyer; chairman of the prestigious Council on Foreign Relations and of the Ford Foundation; and an adviser, official or not, to every President from Franklin D. Roosevelt to Ronald Reagan. Small wonder John Kenneth Galbraith once dubbed him chairman of the American Establishment.

In this earnest, richly detailed biography, Kai Bird defines this Establishment as those who sit on the "interlocking directorships of corporate America, the federal government, and the country's leading public-policy and philanthropic foundations." A contributing editor of *The Nation*, Bird turns McCloy's career into an unparalleled case study of how and to what ends that group exercises power. His book is for anyone interested in America's role in creating the post-World War II political order.

The big surprise is that "the chairman" grew up poor; his widowed mother was a hairdresser. But McCloy worked his way through Harvard Law School and became an expert in international finance. When he died in 1989, his career had spanned more than 70 years, and he had participated in an astonishing range of decisions.

He played a vital role in managing World War II, as chief adviser to Secretary of War Henry L. Stimson. Subsequently, as High Commissioner for Occupied Germany, he was a key member of the high-powered group that, in Dean Acheson's phrase, was "present at the creation" of postwar Europe. Like the others, McCloy was a fervent internationalist who believed the U.S. was destined to prevail in world affairs. He accepted the corollary that the country must be ready to protect its interests with military might. He steadfastly re-

jected Soviet proposals for a neutralized, unified Germany and fought to link a reindustrialized, rearmed West Germany to the U.S.-dominated Atlantic alliance. Yet he later worked tirelessly as a Presidential adviser to curb nuclear arms.

In 1953, McCloy returned to his private career, spent largely in the service of the Rockefellers. At Chase Bank, he finished a long-stalled merger with the Bank of Manhattan and expanded the bank's international presence. Even then, he was often called to public service, as, for example, the only private

about-faced and withdrew their support.

Recounting all this, Bird maintains a measured but critical tone. During World War II, he charges, McCloy "more than any other individual" was responsible for incarcerating West Coast Japanese. He faults McCloy for refusing to order the bombing of Nazi death camps and for granting clemency to German industrialists convicted of war crimes. But except for internment of the Japanese—where McCloy, like Stimson and Roosevelt, succumbed to wartime hysteria—these judgments seem defensible. On bombing the camps, for example, he deferred to military experts who were not persuaded it would save lives.

Bird also thinks McCloy at times subordinated U.S. interests to those of his clients. McCloy, he stresses, saw no conflict: He believed both sets of interests were the same. In the Middle East, for example, he saw the key goal of both the U.S. and the oil companies as main-

taining a reliable supply of oil. It's not an entirely unreasonable view.

Bird calls McCloy one of the Establishment's "more admirable members." But this is fair praise: The Establishment, in Bird's view, "became the stewards of the American national-security state," dominated the cold war, and communist obsessions, staggeringly costly arms race, and the military-industrial complex.

Political leanings—a Bird leans somewhat left—strongly color his opinions. About Vietnam

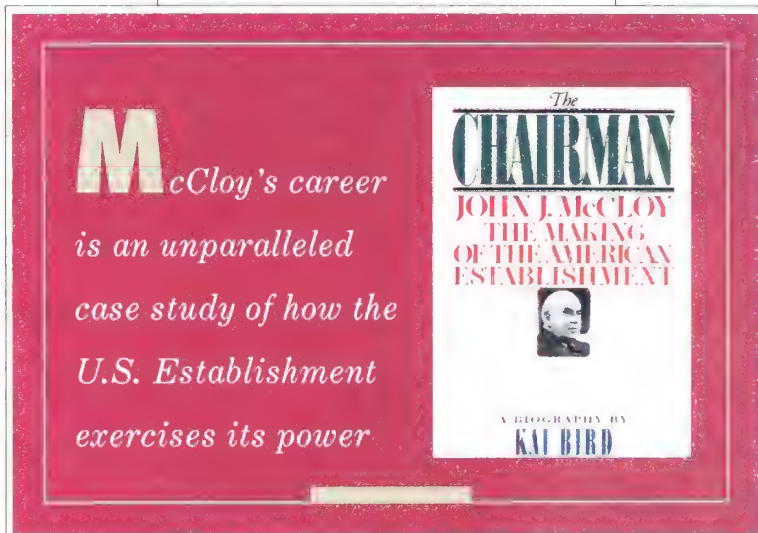
he is right: America's foreign-policy elite failed to provide leadership. As for the cold war, it was not launched by the U.S. alone. Moreover, we won.

Bird, in the end, seems too quick to damn McCloy and the Establishment. In that more trusting era, these men exerted influence on public opinion and on the officials who appointed them. They were able to rise not just through birth but as McCloy did—through merit.

As we dismantle the old policies and institutions, the question is: With whom should we replace them? McCloy, whatever his mistakes, was a man who faced hard facts, made tough decisions, and got on with it. Similar people must be around somewhere. Sadly, they are visible in Congress, the White House, on the campaign trail.

BY JACK PATTERSON

Patterson retired as *BUSINESS WEEK's* editorial page editor.

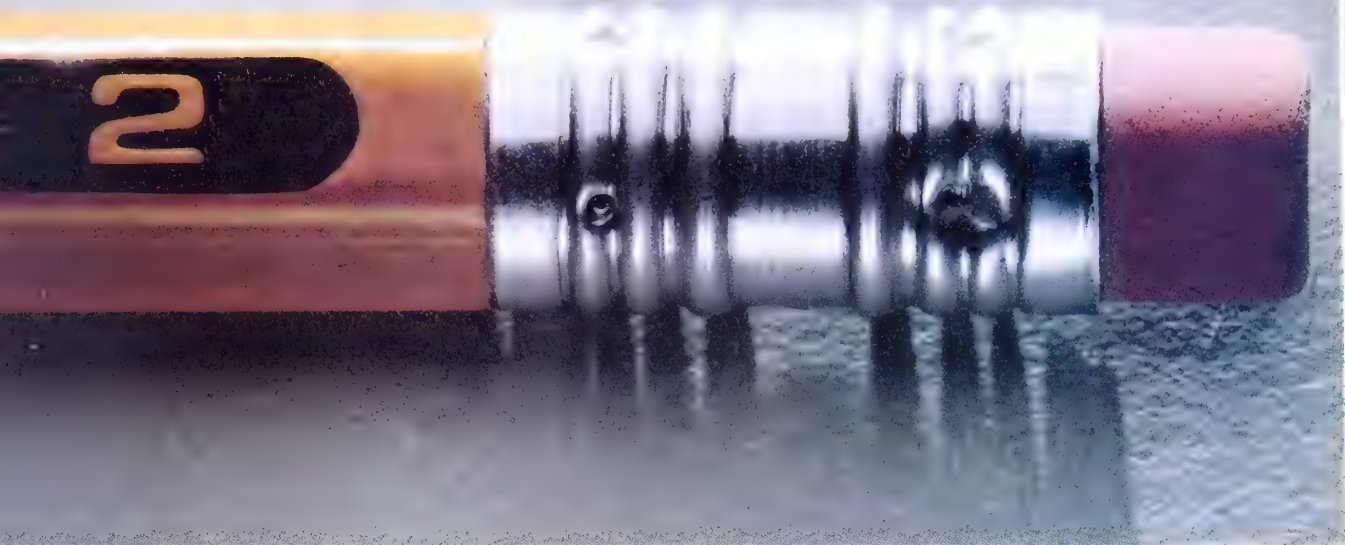


citizen on the Warren Commission.

In some arenas, he virtually erased the line between public and private. He exerted great influence on U.S. policy in the Middle East, where he frequently traveled on behalf of his bank or the "Seven Sisters" oil companies—but often also with a State Dept. mandate. He once won concessions for his oil clients from the Shah of Iran by suggesting that unless the Shah cooperated, his relations with Washington would be hurt.

Like other Establishment "wise men," McCloy was often called to the White House to advise on policy or—particularly in the case of the Vietnam War—to legitimize it. He agonized over Vietnam, Bird says: Although McCloy wanted the U.S. to get out, he saw the war as a symbol of America's determination to have its way in the world. In the end, after backing each new expansion of the war, McCloy and most of his friends

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HOW IS AFFIRMATIVE ACTION LIKE CROP SUBSIDIES?

BY GARY S. BECKER



Both are federal programs that cater to a minority—and may hurt some people along the way. But affirmative action probably causes less harm than many other government policies

Many conservative intellectuals are passionately opposed to quotas and other parts of affirmative-action programs, while liberals just as fervently advocate them. Yet the depth of emotion on this issue seems misplaced when affirmative action is recognized for what it is: a federal regulation that probably causes less harm than many other programs but does hurt some individuals, as it caters to minorities with political clout.

I don't like group quotas and other aspects of affirmative-action programs, but I am puzzled by the handwringing and anger of those who are opposed, especially some intellectuals. Although no one has even rough estimates of the social costs and benefits of these programs, I strongly suspect that certain other subsidies and regulations do more damage. Examples include tax and other breaks to the housing industry, the declines in labor-force participation of elderly persons induced by the tax on Social Security benefits, and higher consumer prices due to quotas on imported cars, textiles, computer chips, and, until recently, steel.

Opposition to affirmative-action programs may be strong because their effects can be so visible: for example, when such programs are used to admit students with weak records to law schools, medical schools, and premier universities or to help promote minority members into high-level jobs, while people who are more qualified are passed over. The harm from most other programs is indirect or hidden from view.

ETHICAL APPEALS. Some opponents argue that affirmative-action regulations are worse than other government programs because the criteria are inborn characteristics: race, gender, national origin, and the like. But other programs that have nothing to do with inherited characteristics often in reality help only a small group. For example, hardly anyone not brought up on a farm ever becomes a commercial farmer. Thus, subsidies to agriculture are in a sense unavailable to people who grow up in cities.

Supporters of affirmative action deny that it is the result simply of political power. They argue that justice demands compensation for the horrors of past discrimination. Opponents argue just as strongly that quotas violate our culture's principle of equal treatment for equal skills, and they reject the notion that the present generation can be held responsible for discrimination in the past.

Both sides in this debate make valid points, but arguments about benefits are usually couched in terms of moral and ethical justifica-

tions, partly to gain the support of other voters. When was the last time you heard anyone defend a government program simply on the grounds that the person wanted to have the benefits? Although Republican opposition to quotas has helped the party make political inroads at the national level among white middle-class blue-collar workers who traditionally vote for Democrats, clearly affirmative-action programs would not be politically viable if they had the support only of those blacks, women, and others who benefit.

SHADOW OF DOUBT. Most other government programs could not have been implemented without support from persons not much affected by them one way or the other. Sure, labor management and employees at Chrysler Corp. did not have enough clout by themselves to get the large federal bailout a decade ago. Alone, the small number of sugar growers in the U.S. would not have had much chance of getting the restrictive quotas on sugar imports that have been in effect for the past 70 years. This need to inflate self-interest into a broader moral and ethical point is why a business executive pleads for government subsidies by explaining that otherwise he might lose his job or have to take a big cut in pay. Instead, he complains about unfair competition from abroad or frightens voters with tales of defense vulnerabilities or the loss of jobs and stockholder equity if help is not forthcoming.

Opponents make much of how affirmative action detracts from the achievements of the most qualified members of minority groups. These able people suffer psychologically from skepticism about whether they deserve the success. Stephen L. Carter, a black professor at Yale Law School, in his book *Reflections on an Affirmative Action Baby*, poignantly describes his experiences with this attitude.

Of course, the doubt cast on the qualifications of successful minority members is unfortunate. But every government program hurts someone—often even some members of the groups that benefit. Studies have documented, for example, that programs involving acreage restrictions on agricultural crop benefit rich farmers sometimes at the expense of poor farmers, who do not get their fair share of the allotments.

Recognizing that affirmative-action programs are government regulations with a complicated incidence of costs and benefits does not resolve the dispute over whether or not they are desirable. But it may help focus the debate on the real question: Do they cause as much harm or do as much good as other government programs that generate very little debate?

GARY S. BECKER IS PROFESSOR OF ECONOMICS AT THE UNIVERSITY OF CHICAGO AND A FELLOW OF THE HOOVER INSTITUTION

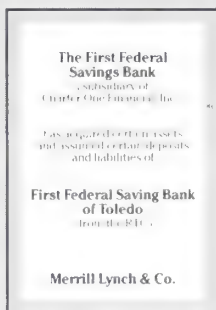
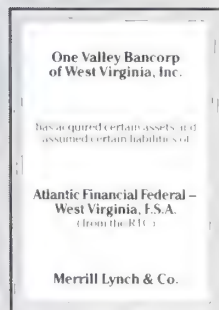
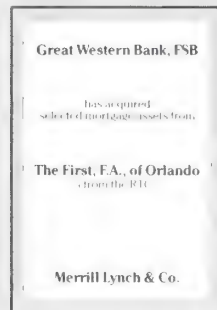
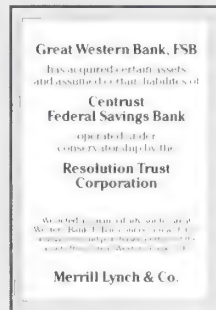
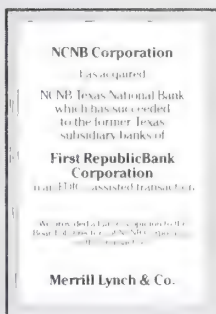
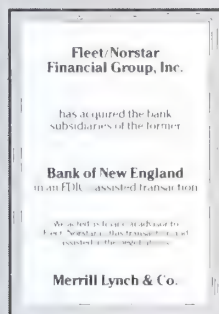
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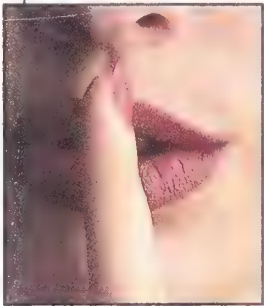


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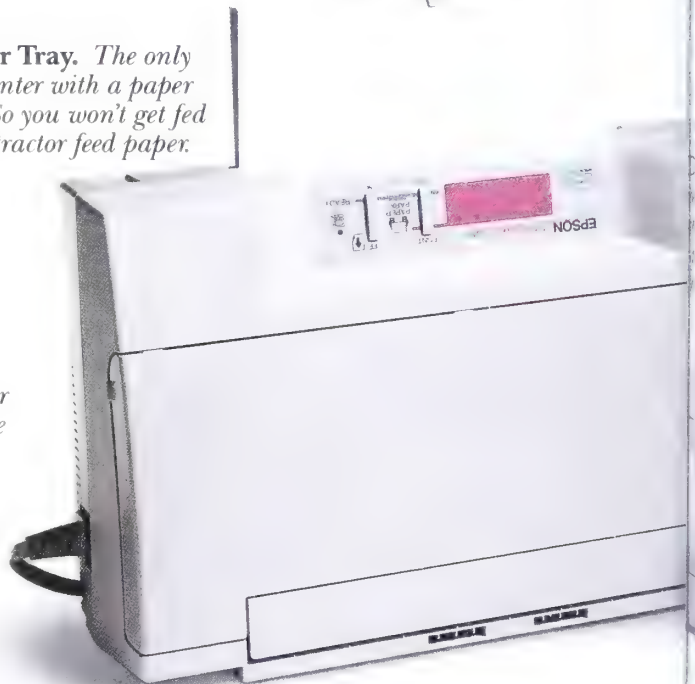
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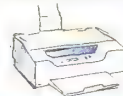
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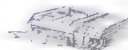
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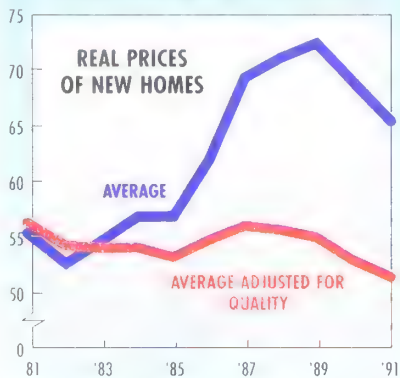
BY GENE KORETZ

THOSE HUGE HIKES IN HOME VALUE ARE BUILT ON QUICKSAND

For many Americans in recent decades, the purchase of a home has represented more than the answer to their housing needs. It constituted a major investment vehicle, one that was expected to appreciate significantly.

At first glance, such expectations seem amply justified by experience. In the past two decades, the nationwide average sales price of existing homes rose steadily year after year, from \$25,700 in 1970 to \$72,800 in 1980, and \$118,600 in 1990. Similarly, the average

THE HIDDEN WEAKNESS OF NEW HOME PRICES



▲ THOUSANDS OF 1977 DOLLARS
DATA: COMMERCE DEPT., A. GARY SHILLING & CO.

sales price of a new single-family home rose by more than 180% in the 1970s and more than 90% in the 1980s.

Economist Tony Riley of A. Gary Shilling & Co. insists, however, that the last decade's price appreciation has been largely illusory. "Homeowners in some regions have done better than inflation," says Riley, "but they've probably done less better than they think. And on a national basis, the evidence indicates that real prices have actually declined."

To be sure, adjusting home prices for the impact of consumer inflation suggests that house values still managed to post some real growth in the 1980s. After jumping some 35% from 1970 to 1980, real average new-home prices rose an additional 24% by 1990, while real existing-home prices inched up by 3%.

This difference in recent real price performance is critical, argues Riley. Simply adjusting prices for inflation, he says, neglects the fact that some price increases reflect a shift toward larger homes with more features. And because

the stock of existing homes for sale is dominated by older homes, such shifts are more pronounced in the mix of new homes hitting the market.

Fortunately, the Census Bureau has developed a quality-adjusted price index to remove the impact of quality improvements on new-home values. The index takes into consideration price changes stemming from such features as more square footage, bathrooms, fireplaces, garages, and other amenities.

The importance of this price index becomes startlingly clear, says Riley, when one uses it in adjusting new-home prices for both quality changes and inflation (chart). "That dual adjustment reveals that new-home prices actually rose less than inflation in the 1980s," he says.

Although a similar quality-adjusted index for existing-home prices is not available, Riley argues that the same forces that affect new-home prices inevitably affect the existing stock of homes. "The modest rise in the real prices of existing homes over the past decade," he says, "almost surely translates into a significant decline once one adjusts for the increase in the size and quality of homes changing hands."

Many homeowners are already aware of the lack of appreciation of real house prices, believes Riley. "As this awareness spreads to prospective buyers," he predicts, "people's ideas of how much house they need and are willing to finance will inevitably change."

A THRIFTY RTC COULD SHAVE BILLIONS OFF THE DEFICIT

Despite fears of an exploding deficit, economists at Shearson Lehman Brothers Inc. expect the fiscal 1992 budget deficit to come in at \$340 billion, much lower than the Office of Management & Budget's official forecast of \$400 billion. A major reason: lower-than-expected outlays for deposit insurance.

Shearson's Washington-based analyst Thomas D. Gallagher notes that while the budget office expected net outlays of the Resolution Trust Corp. to reach \$40 billion this fiscal year, the agency thus far has actually taken in as much in asset sales as it has spent in closing failed thrifts. With Congress dragging its feet in extending the RTC's spending authority and with revenues from asset sales higher than anticipated, Gallagher expects that RTC net outlays in fiscal 1992 will fall at least \$10 billion below projections. Similarly, net outlays by the bank insurance fund totaled a paltry \$4 billion at last count, compared to OMB's

full fiscal-year projection of \$33 billion.

In any case, Shearson economists concede that lower deposit insurance outlays will have negligible economic impact. But they do anticipate a toning effect on the bond market. They also think that relatively strong economic growth in coming months will help put the deficit below expectations.

AMERICAN DEBT ABROAD IS LESS THAN IT'S CRACKED UP TO BE

America's position as an international debtor is significantly lighter than previously reported. Economist H. Eric Heinemann of Ladenburg, Thalmann & Co. points out that new Federal Reserve data indicate that foreign investment in the U.S. exceeded U.S. investment overseas by \$543 billion in 1989 and \$52 billion in 1990, about \$150 billion less than the Fed's original estimates.

What's more, the Fed puts America's net foreign debt at the end of 1991 at \$559 billion, only slightly higher than its average level in the previous two years. In other words, notes Heinemann, after going from a net creditor position of \$240 billion in 1981 to becoming the world's largest debtor during the Reagan years, the U.S. has stabilized its debt under the Bush Administration.

"On this basis," says Heinemann, "the real cost of servicing U.S. international debt should drop steadily as a share of gross domestic product."

IS THE SHEER VOLUME OF JOB SEEKERS A DOWNBEAT SIGN?

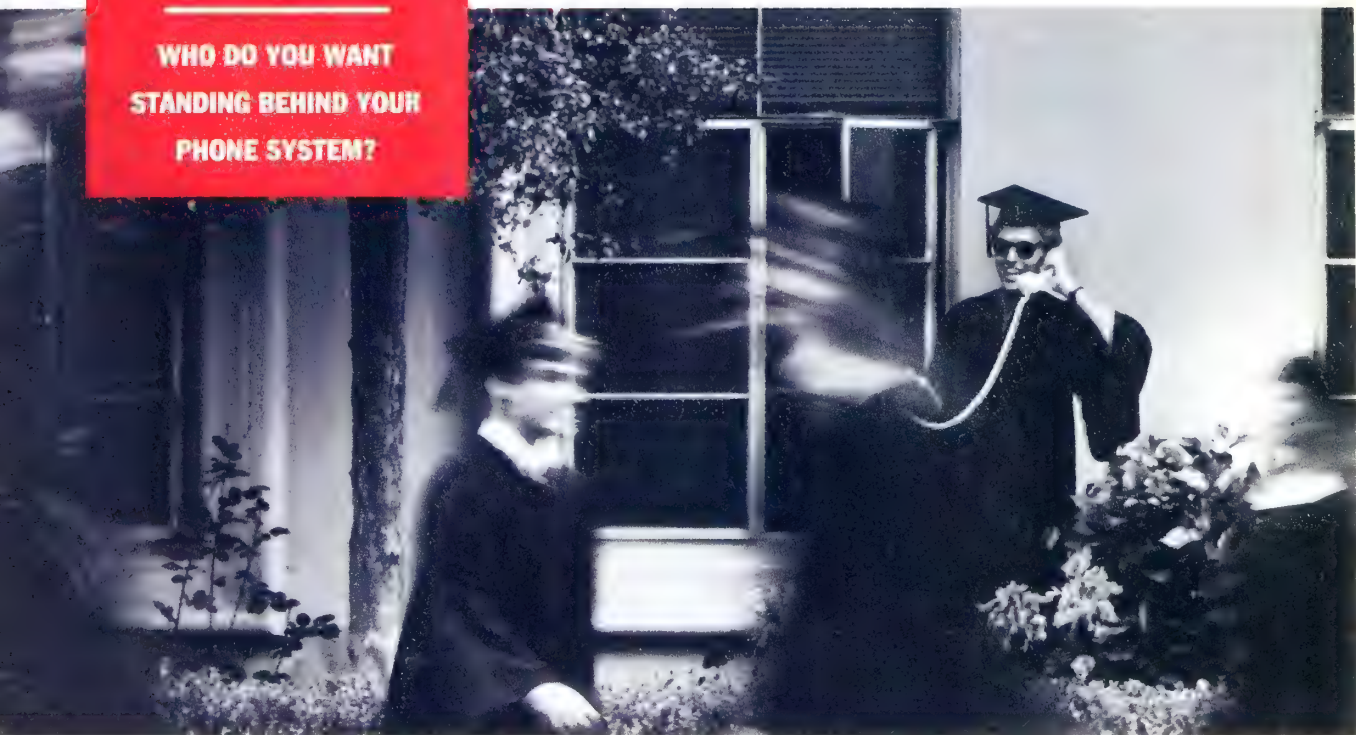
In the past four months, some 1.2 million people entered the labor force compared with less than 700,000 in the prior 16 months. Although the surge would seem to reflect the effect of improving job prospects on would-be workers, economist Michael Moran of Daiwa Securities America Inc. isn't so sure.

Moran notes that the Labor Dept. count of discouraged workers who remain out of the labor force because they don't think jobs are available has been steady for three quarters. Yet the number of people who say they are not seeking work because of housekeeping responsibilities fell sharply last quarter.

"Apparently," says Moran, "a lot of people who would ordinarily stay at home to do housework are pounding the pavement in an effort to boost family incomes that have been hurt by layoffs

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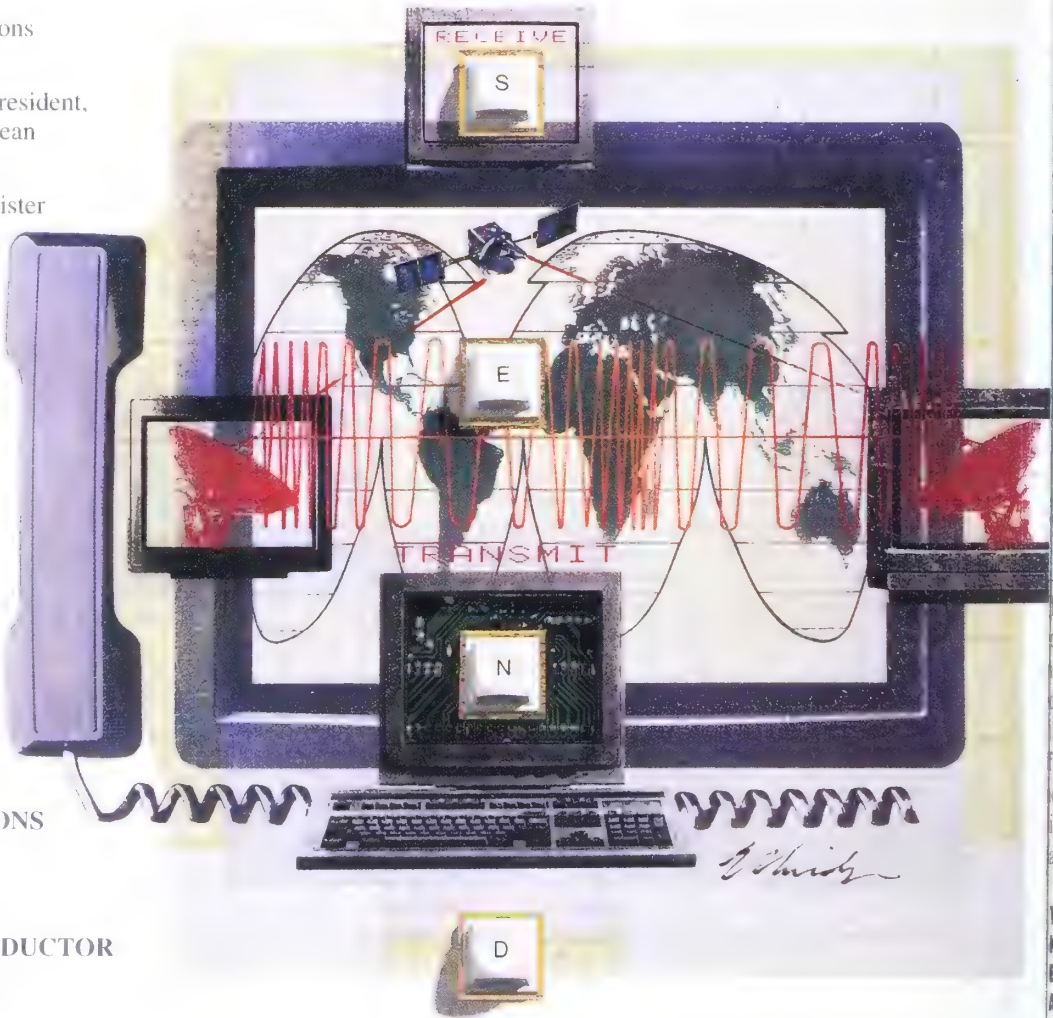
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SYSTEMS INTEGRATION IN THE AGE OF MARKET INTEGRATION

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THE FED BUYS LITTLE RECOVERY INSURANCE

Growing optimism about the U.S. recovery is finding its way into economists' forecasts. The nameplate on the April issue of *Blue Chip Economic Indicators*, a widely followed survey of about 50 forecasters, sports a bright green banner for the first time in more than three years.

The green logo means that economists are bullish enough to forecast growth in real gross domestic product of 3% or better in the coming year. That's their expectation for the third quarter of 1992 through the end of 1993. *Blue Chip's* "go" signal follows 10 months of low banners that warned of anemic growth below 2% and seven months of recession red.

Of course, the economists got burned last year with a similar forecast of a modest recovery that never got off the ground. But this year, the Federal Reserve seems determined to keep that green banner flying.

In a surprise move on Apr. 9, the Fed trimmed a quarter-point from the federal funds rate—the cost of funds borrowed between banks—from 4% to 3¾%.

The cut in this key policy tool lowers a broad range of borrowing costs. The action appeared to be recovery insurance—to ensure that the upturn now unfolding will peter out, like last year.

Several important indicators turned sour in March, after strong gains in earlier months. Retail sales fell last month. Car sales dipped. Industrial production posted a 0.2% gain. The labor markets looked weak. And, of special concern to the Fed, the money supply fell sharply.

**THEY'RE
NOT JUST
SHOWING
ANYMORE**

However, a closer read of the data reveals the classic makings of a cyclical upturn. With the Fed's help, consumers are leading a pickup in demand, with capital spending set to join the parade. Stronger demand has prompted manufacturers to build up inventories and laid the groundwork for spring gains in output and employment. Jobs and incomes will lead to more spending and keep the recovery going.

Consumers did take a breather in March, with retail sales dipping 0.4%, but that followed big gains in both January and February. For the entire first quarter, real retail buying jumped at an annual rate of 11.4%—the best quarterly advance in 5½ years (chart).

Auto dealers were busy last quarter, posting a 15.9% annual rise in receipts. But dealers seem to be moving

more trucks than cars. In March, U.S.-made new cars sold at an annual rate of just 6 million. And sales began April at only a 5.8 million pace. Lightweight trucks and minivans are taking up some of the slack, though. Sales of these vehicles climbed to a 4.1 million annual rate in March, up from 3.6 million in February.

The housing rebound is also heating up retail buying. Sales of building materials and furniture have soared, rising at respective annual rates of 45% and 24.4% in the first quarter. And with mortgage rates slipping below 9% once again, the rebound in homebuilding and buying should pick up some steam in the second quarter.

Department and clothing stores also did well in the first quarter. And both sectors could see better sales in April. A late Easter depressed retail buying in March, but it will boost spending this month.

**FACTORY
EXECUTIVES
FEEL
BETTER**

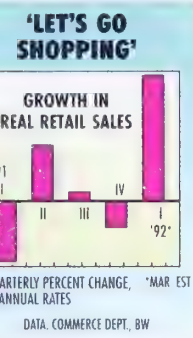
With shoppers buying again, retail inventories are getting leaner. Total business inventories were flat in February. Retail stock levels were also unchanged, but they had dropped 1% in January. Because of stronger demand, the ratio of retail inventories to sales dropped in February to the lowest level in nearly four years (chart).

Emptier warehouse shelves brighten the outlook for manufacturers. Industrial production eked out a 0.2% gain in March, after rising 0.5% in February. A 2.1% jump in utility output, reflecting cold weather, boosted production, but a 4% drop in auto assemblies was a drag. For the quarter, output fell at a 4% annual rate, but a rebound in retail ordering means factory output and jobs in the second quarter should look stronger.

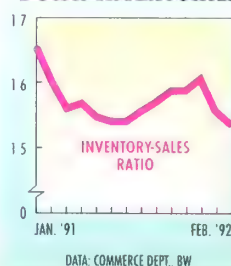
Dun & Bradstreet Corp. reports that manufacturers' optimism about the future improved in March for the fourth straight month. Factory executives are more upbeat about new orders and production over the next three months, although they remain cautious on hiring.

Companies are still a bit wary about capital spending, but outlays tend to pick up only after the economy has clearly turned the corner. Businesses still have a lot of idle capacity. The industrial operating rate stood at 78.1% in March, up slightly from February.

The Commerce Dept.'s latest survey, done in the first quarter, shows that businesses plan to increase outlays on new plants and equipment by 4.6% this year. That's



**RETAILERS WHITTLE
DOWN INVENTORIES**



Business Outlook

down slightly from the 5.4% advance expected in the previous survey taken in October and November, but the increase will reverse last year's 0.6% decline.

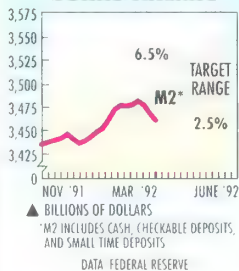
For now, all the 1992 gain is slated for nonmanufacturing industries. They plan a 7.3% rise in outlays. Manufacturers are planning a 0.4% cut in their 1992 plant and equipment spending, on top of a 4.7% drop in 1991. But if the recovery is on schedule, businesses will probably boost their plans as the year progresses.

THE FED DISCOUNTS INFLATION WORRIES

The Fed apparently wants to make doubly sure that the recovery process stays in gear this time. Because the economy appeared to be responding to past rate cuts, the financial markets and most economists had written off any near-term easing of monetary policy.

Moreover, at least one Fed official had stated just prior to the Apr. 9 move that the full impact of the big half-point cut in the federal funds rate on Dec. 20 had not yet hit the economy—not to mention the Apr. 2 cut in the reserve requirement for banks.

MONEY GROWTH TURNS ANEMIC



And 1992 is a Presidential election year.

The Fed's chief concern undoubtedly was the money supply (chart). The broad M2 measure fell \$7.1 billion in the week ended Mar. 30, following prior drops of \$9.3 billion and \$4.1 billion. M2 has now fallen to the bottom

of the Fed's 2½%-to-6½% target range for M2 growth.

Several technical factors influenced the money slow down, including a stepped-up pace of closings of failed savings and loan associations, which temporarily shrink M2. Most analysts expect M2 to pick up in coming months. If it doesn't, the Fed may trim another quarter point from the federal funds rate. It could do that with out lowering the discount rate, now at 3½%. A cut in the discount rate would be viewed as a major policy easing.

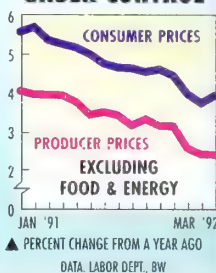
Wall Street embraced the Fed's latest move, partly because of the bright inflation outlook. The large 0.5% jump in March's consumer price index, announced a day after the rate cut, caused consternation in the credit markets, but it was short-lived. The markets decided, rightfully, that the spurt was a fluke and not indicative of inflation's underlying trend.

The CPI should settle down in April. Gas prices flattened out by late March, and food prices should ease back down, after a temporary spike in March vegetable prices. Also, the government's seasonal adjustment tends to overstate increases in clothing prices during the introduction of new spring lines.

Core inflation, which excludes gyrations caused by food and energy prices, is trending downward for both consumer prices and producer prices (chart). During the past year, the core CPI has risen 3.9%, compared with a 5.3% rate a year ago. And the core PPI is up only 2.4% down from 3.9% a year ago.

Low inflation will give the Fed the leeway to ease policy again if it so decides. But even if the central bank stands pat, its latest rate cut, coming so unexpectedly, leaves no doubt that the Fed is giving the recovery the green light.

CORE INFLATION IS UNDER CONTROL



THE WEEK AHEAD

FEDERAL BUDGET

Tuesday, Apr. 21, 2 p.m.

The federal government will report a \$49 billion deficit for March, forecast economists surveyed by MMS International, a division of McGraw-Hill Inc. That would be a much wider gap than the \$41.2 billion posted a year ago. So far in fiscal 1992, which began Oct. 1, federal outlays have risen by nearly 8% compared with a year ago, while receipts have been flat. However, most economists are scaling back their 1992 deficit projections, from close to \$400 billion to about \$350 billion. That's still overwhelmingly a record high, and much larger than the \$268 billion of 1991. Slower growth in spending on the thrift bailout is one reason. A

smaller budget gap would quell fears in the bond market of a crowding out between private and public borrowings. If those worries are calmed, long-term interest rates could edge lower.

UNEMPLOYMENT CLAIMS

Thursday, Apr. 23, 8:30 a.m.

New filings for state unemployment insurance benefits likely stood at an annual rate of about 430,000 for the week ended Apr. 11, not much different from the 432,000 pace for the week ended Mar. 28. However, claims have been edging lower since January, when they hit a 460,000 pace. If jobless claims drop even lower than expected in mid-April, it could indicate a better job picture for this month after a paltry 19,000 gain in

jobs in March. Improvement in employment is crucial for a sustained recovery.

DURABLE GOODS ORDERS

Thursday, Apr. 23, 8:30 a.m.

New orders taken by durable-goods producers are expected to climb by about 1% in March, according to the MMS survey. If so, that would be another turn in a zigzag pattern for new orders since September. Orders fell a slight 0.3% in February and stood no higher than they did five months earlier. The small gain in new orders suggests that the backlog of unfilled orders was nearly flat in March. It has fallen for six consecutive months, including a 1% drop in February. The backlog will have to increase before output will grow significantly.

1992 TEN BEST CARS

Nissan Sentra SE-R

Is it hotly? Or at best a bit on the retro side? Yes. Is it wonderful? Also yes. And not the least of its attractions is a price tag that won't stun you.

The SE-R has been called the BMW 2002 of the 1990s, and we won't quarrel with that. What's more, this being the 1990s, you get a car that doesn't require the kind of skilled and often expensive attention once demanded by a small BMW. (am without the pain as it were.)

At the heart of our attraction for the SE-R is its engine: a DOHC sixteen-valve, all-aluminum 2.0-liter hot-rod grafted as a truckster with 140 horsepower in highly usable form.

The SE-R made our list last year because we felt that it delivered about as much fun for as little money as you could reasonably expect a car to do. This connection continues, though it's softened somewhat by the base price having risen from less than \$11,000 to just over \$12,000. But the good news is that you can have an SE-R with air, a stereo, and ABS for just over \$14,000. Good news indeed.

Vehicle type: front-engine, four-wheel-drive, 5-speed manual
Base price: \$12,150
Options: \$2,000 (air, stereo, 20-speaker system, power windows)
\$10,000 (ABS, 160 mph @ 100 ft. per



¹MSRP excluding taxes, title, license, destination charges and options.
For more information call 1-800-NISSAN-6. Smart people always read the fine print. And they always wear their seat belts.

APRIL 27, 1992

WHERE THE JOBS ARE

SOME SECTORS ARE POISED TO EXPLODE

Let there be no mistake: The current job outlook is bleak. Titans such as IBM, General Motors, and General Dynamics continue to slash jobs. And college seniors are heading for big disappointments. "Last year's graduating class was not facing great prospects," says Kenneth Goldstein, an economist at the Conference Board. "But this class is coming out into a worse labor market."

But cheer up, harried job-hunter, all is not lost. The forces that will produce the new jobs of the 1990s are already in place. Information services will generate new hiring as the computer revolution rolls on. The graying of America will mean strong job growth in health care and leisure activities. And a raft of private companies are springing up to take on tasks that government once did itself.

So powerful are those engines of job creation that not even the recession could check their progress. Over the last year, companies in sectors as diverse as software, skiing, hospitals, and private bus services have added a total of 600,000 jobs, even while overall employment was sinking.

NEW COLLARS. If history is any guide, that's a sign of many more job openings to come. Industries with enough vigor to grow during hard times typically explode once the economy improves. Look back at the recession of 1981-'82: Financial, legal, and business services all began hiring months before that downturn ended. In the end, they became some of the biggest job producers of the 1980s.

The expansion of the 1980s was the sort of boom that comes along once a generation. The coming recovery almost certainly won't be nearly as strong.

Moreover, few new jobs will be of the skilled, well-paid, blue-collar variety that is fast vanishing from the U.S. Nor will some white-collar workers, laid off from a bank or defense company, easily make the shift to the new growth sectors. But the economy of the 1990s will produce its share of good jobs. Here's where you're likely to find many of them:

■ **Information services.** Software, data processing, and computer-services companies employ over 800,000 people, more than the auto makers—and they're growing. Personal computer software sales will rise 24% this year, estimates market researcher International Data Corp. Microsoft Corp. added more than 3,000 workers in 1991. Cincinnati-based Structural Dynamics Research Corp., a supplier of software used to design everything from auto parts to satellites, last year hired 100 new program-

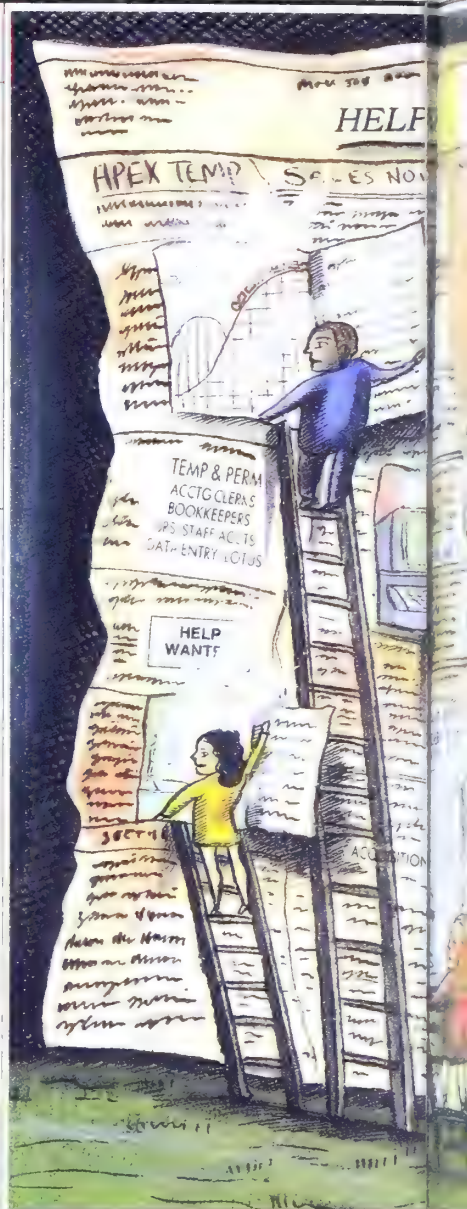
mers, marketers, and customer service personnel. And CEO Ronald J. Friedsam expects to add another 150 employees to the payroll in 1992.

As people start trading vast quantities of text and video across networks, companies will spring up to help transmit, coordinate, and sift through all that information, predicts Jacqueline C. Morby, a senior partner with TA Associates, a venture capital firm in Boston. Information providers will grow as well. One example: Ohio-based Mead Data Central Inc., which publishes on-line data bases, added about 100 workers in 1991.

■ **Privatization.** Want to work for the commonweal? Try the private sector. "States will continue to have fiscal stress for most of the 1990s," says Steven Gold, director of the Center for the



Data networks will spawn a new breed of company



FINDING THE

CHANGE IN PAYROLL EMPLOYMENT
(FEBRUARY, 1991-FEBRUARY, 1992)

INFORMATION SERVICES 7.1%

SOFTWARE AND DATA PROCESSING, DIRECT MAIL, AND GRAPHICS SERVICES

With more than 50 million personal computers in homes and offices, companies providing the software, networks, and services will need many more people

PRIVATIZATION 4.7%

PRIVATE LOCAL AND SUBURBAN TRANSIT, PRIVATE SANITARY SERVICES

Despite enormous state and local deficits, taxpayers want more government services. The solution: Let the private sector do it

SOURCE: BUREAU OF LABOR STATISTICS, BLS



ING KIND

CARE 4.6%

SERVICES,
HOSPITALS AND
S, RELATED
(BIOTECH,
ICALS, ETC.)

More elderly people mean rising demand for health care and the workers who provide it. Advances in biotech and other high-tech health sectors will stimulate whole new industries

LEISURE 2.4%

EMENT AND
N SERVICES,
D SPORTING
DS MAKERS

Aging baby boomers will have more time and money to spend on leisure. Rising real income will boost spending on vacations and recreational sports

-0.3% TOTAL NONFARM EMPLOYMENT

Study of the States. At the same time, taxpayers want better service. In response, more and more governments will turn to private companies to run prisons, collect garbage, and drive buses.

That's how San Diego expanded bus service to outlying suburbs without draining scarce tax revenues. Today, half of all bus routes in sprawling San Diego County are run by private contractors. Nationwide, while public transit jobs declined by 2,000 over the last year, private local transit employment rose by 5,000, the Labor Dept. reports.

Privatization is also creating new jobs at Wackenhut Corp., the giant Florida security company. Wackenhut manages nine prisons in the U.S., employs parking-meter attendants in Anchorage, and runs two of the nation's largest job training programs. Robert C. Kneip, senior vice-president for planning and development, expects Wackenhut's government service jobs to grow at an annual rate of more than 10% over the next decade, producing openings for security guards, managers, and vocational-education teachers, among others.

■ **Leisure.** If the quintessential 1980s worker was a bank manager or a retail clerk, the 1990s counterpart may be an amusement park owner or an aerobics instructor. As baby boomers and their children grow older, they will spend more on travel and leisure activities. Hints of the trend already show up in consumer-spending patterns. Since the recession started in July, 1990, total consumer spending, adjusted for inflation, has risen only 1.2%. But outlays on toys, sporting goods, and participant sports have risen by 8.1%.

The ski industry, for example, is benefiting from "a boomlet of baby-boomer children, who are going skiing and bringing their parents back to the sport," says John I. Lay, president of Colorado Ski Country USA, which repre-

sents 25 areas in the state. Jobs in the skiing industry are expected to grow 3% to 5% a year, and some ski resorts could even have trouble hiring all the maids and ticket takers they need, Lay reports.

The same demographic changes are also fueling growth at Discovery Zone, a Kansas City-based company that franchises indoor playgrounds. For a small fee, children can crawl through plastic

pipings and slide into wading pools filled with colorful balls. This year, Discovery Zone went from 121 sites to nearly 200. "We didn't just create a new business here, we created a new industry," boasts Jack V. Gunion, president and chief executive of Discovery Zone.

And there has been no downturn in toyland. Ohio-based Little Tikes Co., which makes toys

for preschoolers, added 500 people to its payroll last year, a 25% increase. It expects a similar gain this year. With sales booming here and abroad, "we never really felt the recession at all," says Gary S. Baughman, head of Little Tikes, a division of Rubbermaid Inc.

■ **Health.** Job-seekers long have looked to health care as one of their most dependable sources of openings. That's not going

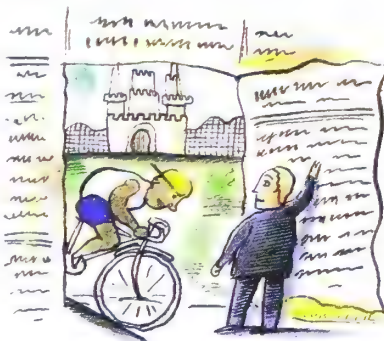
to change any time soon, especially as the number of people age 75 and over climbs sharply in the 1990s. Even attempts at cost-cutting can't stop the big health care job machine. "Now, patients are coming out of the hospital quicker and sicker," says Charles H. Blanchard, CEO of Caremark Inc., Baxter International Inc.'s fast-growing

home health care subsidiary. That means more work for Caremark, which sends nurses and other health care workers to patients' homes. The company had to boost its nursing staff by 40% last year, and it expects to keep hiring in 1992.

The stock market can take some credit for furious hiring by biotech companies. Since early 1991, more than 100 companies have raised about \$5 billion in new



Contractors run everything from buses to prisons



Demographics bode well for sporting-goods sales

Top of the News

equity. That means many hundreds of job openings, predicts Cynthia Robbins-Roth, editor of *BioVenture View*, an industry newsletter. Take CellPro Inc., of Bothell, Wash., a company in the red-hot field of cellular and gene therapy. Having raised \$35 million in an initial public offering last September, the company expects to add 60 workers by yearend, more than doubling its payroll.

The new workers aren't just high-paid, PhD-toting molecular biologists. Newspapers in such hotbeds of biotech as San Francisco and Boston run columns of want ads seeking high school or college graduates who can wash test tubes and assist the scientists. Says Robbins-Roth: "It's beginning to get difficult to find people at the technician level."

Those kinds of worries are good news

for job-hunters with the right stuff. The long dry period for American workers is not over yet. But if you know where to look, you can see the job opportunities of the 1990s already starting to beckon.

By Michael J. Mandel in New York and David Greising in Chicago, with Joan O'Hamilton in San Francisco, Gail DeGeorgy in Miami, Sandra Atchison in Denver, and bureau reports

THE PRESIDENCY



POLITICAL MUDSLINGING ENTERS THE INFORMATION AGE

The 'opposition research' nerds are booted up and ready



In Bill Clinton's Washington campaign headquarters, three young computer jocks known as the candidate's "propeller heads" pore over PCs long into the night. The fruits of their labor appear in such places as Florida, where Paul Tsongas had attacked Clinton's coziness with the head of a failed Arkansas savings and loan. Within hours Clinton fired back, brandishing a 10-year-old letter from an S&L trade group praising then-Senator Tsongas for his role in deregulating the industry. That shifted the focus from Clinton's business dealings to Tsongas' role in the savings and loan fiasco.

Clinton heads into his fall matchup with George Bush with many disadvantages. But the ability to dig up dirt on his opponent isn't one of them. "For years, the

Republicans have been doing this," says Paul Begala, who oversees Clinton's opposition-research effort. "Finally, we have nerds of our own."

Across town, David Tell, head of research for the Bush-Quayle team, manages a weary smile. The 32-year-old muckraker has spent a year becoming an expert on the Clinton era in Arkansas. And while he never discusses his

work, he is scornful of former California Governor Jerry Brown, who missed a golden opportunity to zing the Democratic front-runner in the New York primary. Clinton mugged Brown in Gotham for supporting a value-added tax, but Tell notes, Clinton flirted with a similar scheme in 1989—a tidbit easily unearthed by GOP researchers.

BRICKBAT BATTLE. Brace yourself, America. With both Bush and Clinton staggering under high negative ratings, and with voters angry at all politicians, both candidates will be hurling brickbats this fall. The result will be a campaign free for all that could make the infamous Willie Horton ad look like a public service announcement.

For now, both candidates are promising to stay on the high road. The President declared on Apr. 10 that he wants his staff "to stay out of the sleaze business." Clinton, for his part, insists that he is only interested in avoiding a repeat of 1988, when Massachusetts Governor Michael S. Dukakis failed to counter devastating Republican attacks on his prison-furlough policies, his patriotism, even his mental stability.

Don't believe it. "Beneath the affability of both Bush and Clinton are fierce campaigners," say veteran Democratic consultant Ted Van Dyk. "It's bound to turn

MEET THE MUD-MEISTERS

PAUL BEGALA Clinton's spin doctor. He and his "propeller heads" helped Harris Wofford upset Dick Thornburgh in Pennsylvania's 1991 Senate race

DAN CAROL With a staff of six and a two-year-old computer system, the Democrats' research director is trying to catch up with the GOP

JOE RODOTA The pioneering Rodota, an aide in the Reagan White House, started the first private opposition research firm, Benchmark Research Group

DAVID TELL Director of research for the Bush-Quayle campaign. He may know more about Clinton's record in Arkansas than Clinton's own aides

DATA BW

ly nasty." Adds a senior Bush adviser: "It feels like World War I. The question is, who'll use gas first?" Warns Clinton: "We haven't taken a no-first-use pledge."

The cloud of rumors and allegations surrounding Clinton has obscured his taste for the political jugular. In Florida, the letter, which researchers discovered in an archive at the Lowell (Mass.) public library, threw Tsongas on the defensive and helped Clinton win. Later, as Brown was rolling, Clinton aides led reporters to a 1983 memorandum by pollster Patrick C. Dell. In it, a fictional "Senator [Clinton]" mounts a Presidential campaign during rhetoric almost identical to Clinton's. The implication: Brown is an opportunistic puppet.

LIST. Bush will be a much tougher opponent, but Clinton has ammunition: a vast base of information about Bush's family business dealings, including son George's role in the failure of a Denver investment firm and brother Prescott's ties to a major investment firm with reputed worldwide links. Also on the hit list: Bush's who lobby for big corporations or foreign interests.

The Clinton campaign also has a meticulous record of every Bush flip-flop. The Democrats are prepared to go to court if charges of Clinton's womanizer resurface: They'll revive old rumors about Bush's involvement with a female staffer. The Clinton campaign will keep an attack file in a laptop computer on campaign plane at all times.

The Democratic National Committee the first time has its own opposition-research unit, headed by Dan Carol, but the GOP is still the undisputed champion in this muddy field. The Republican National Committee, together with Reagan operatives such as Joe Rodota, pioneered opposition research a decade ago and twice the budget and four times the staff of the Democrats. "I guarantee you, in the first debate, Bill Clinton will say something that isn't true, and in 90 minutes, [the correct] information will be in the hands of two selected Republican spokesmen in key media markets," says Philip Kawior, founder of the RNC opposition-research unit.

Technology has made opposition research easier, but some old rules still apply. Foremost is the dictum that there must be some truth behind every lethal lie. "If it's a lie, you become the lie," says Kawior.

Bush and Clinton don't intend to lie, but they'll pump out skewed information in an inuendo. With two unpopular politicians swimming in a sea of voter rage, the theme song of the campaign won't be Bush's 1988 anthem, "Don't Worry, Be Happy." For '92, it's sounding more like "Nasty As They Wanna Be."

By Douglas Harbrecht in Washington

City, town, post office, state, and ZIP code (if you have a foreign address, see page 11)

Presidential Election Campaign (See page 11)

Do you want \$1 to go to this fund? ☐ Yes ☒ No

If joint return, does your spouse want \$1 to go to this fund? ☐ Yes ☒ No

Filing Status

1 Single

2 Married filing joint return (even if only one had income)

3 Married filing separate return. Enter spouse's social security no. above and full name here

Paper: Act Notice, see instructions.

Note: Checking "Yes" will not change your tax or reduce your refund.

Commentary/by Howard Gleckman

WANT CAMPAIGN-FINANCE REFORM? JUST CHECK THE BOX

This was supposed to be the year that voters finally forced Congress to fix the country's corrupt political system. You know the litany: Politicians are bought and sold by "special interests" and aren't accountable to ordinary Joes and Janes. It is this surly mood that's fueling support for Jerry Brown and H. Ross Perot.

It's a fine whine. But voters are passing up a tailor-made chance for action. Each Apr. 15 for the past 18 years, taxpayers have had the opportunity to reduce the clout of special-interest money in politics. To do so, they need only check the box on their income tax return that designates \$1 for Presidential campaign financing.

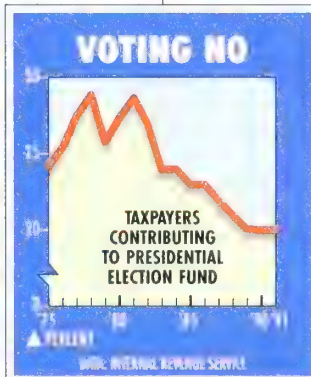
The money is used to match private donations made to primary campaigns, to help pay for nominating conventions, and to fully fund the general election. This year, for instance, President Bush and the Democratic candidate each will get \$55 million for their fall campaigns.

Maybe the best thing about the "contribution" is that it comes from taxes already owed, so checking "yes" doesn't increase a taxpayer's overall bill. No matter: These days, a full 80% of filers shun the checkoff (chart). So, while the Presidential campaign fund will be able to meet its obligations this year, the Federal Election Commission figures it is headed toward a \$100 million shortfall in 1996.

BIG WINK. Meantime, raging apathy allows politicians, interest groups, unions, and business to ignore campaign-contribution rules with a collective big wink. Fat cats evade the regulations with gifts of "soft money"—contributions of manpower, advertising, and even cash laundered through the political parties. The courts have ordered the FEC to restrict such prac-

tices. Instead, as voters yawn, the abuses go unchecked.

The Presidential checkoff was created in 1974, in a post-Watergate wave of reform. For a while, the system worked. Participation increased steadily until 1981, when the slide began. It's too soon to tell how voters responded this year, but there's little reason for optimism.



That's partly because both the Reagan and Bush Administrations have stoutly opposed public financing. And this year, the FEC spent just \$125,000 to promote the checkoff—barely enough for one 30-second prime-time TV spot.

But two events—Perot's possible Presidential candidacy and a new Democratic reform bill that Congress will

soon pass—make public sentiment on the issue critically important. Perot, who is worth at least \$2.5 billion, can simply ignore the entire system of funding regulations by bankrolling his own campaign. The result? A strange race where a billionaire populist tries to outspend an incumbent President.

WASTE OF TIME. While Perot threatens to make a mockery out of public financing, Congress is finishing a bill that would cap election spending and fund congressional races. Democratic lawmakers claim the measure would help clean up the political system and restore voter confidence, though they haven't said where the dough will come from. Bush, who has taken \$200 million in public money during his political career, vows to veto the bill.

If people keep ignoring the Presidential checkoff system, legislative reforms are just a waste of time. Voters may be mad as hell about politics as usual, but they're not angry enough to make just one pencil stroke in the name of cleaner campaigns.

JOHN BULL IS FEELING A LITTLE BULLISH

Major's reelection could be the push that gets recovery rolling

Worried about the prospect of sharply higher taxes under a Labor government, the middle-class residents of gentrified London simply stopped buying or selling houses in the three weeks leading up to Britain's national elections. Then, on Apr. 10, within hours of the announcement of Prime Minister John Major's surprising victory, the phones at Foxtons Ltd. real estate offices began ringing off the hook. "It was one of the best days we've ever had in 10 years of business," says Jon M. Hunt, the company's managing director. "We're on our way out of the trough."

Of course, the triumph of Major and his low-tax, probusiness Conservative Party isn't going to solve recession-plagued Britain's economic problems overnight. But the prospect of a fourth term of free-market conservatives has given both businesses and consumers a badly needed boost of confidence. Indeed, Britain's financial markets were buoyed immediately by the win: Stocks are up a hefty 8% since the vote, and sterling has risen 2.1% against the German mark.

Now, there's even hope that the elections could provide enough of a boost to jump-start the economy. Already, businesses are posting a trickle of positive signs—from a more buoyant housing market to rising sales of used cars. Industrial production already has crept up 1.1% in February. And Europe's largest paper company, Arjo Wiggins Appleton PLC, recently reported an uptick in orders of business stationery and invoices—one barometer of the business climate. "The surge in confidence after the election will give the recovery an important push," says Stephen R. Walls, the company's chief executive.

The Conservative Party's victory has

left many of Britain's top executives clearly relieved. "I'm over the moon," says Sir Allen J. G. Sheppard, chairman of Grand Metropolitan PLC, the huge food and beverage conglomerate. And companies such as Hanson PLC, may be back on the acquisition trail now that Labor's threat to restrict takeovers deemed potentially hurtful to the public interest is by the boards.

For now, Labor seems trapped with a shrinking working-class constituency,

ated Engineering Union, says Labor loss came down to this: "We were unable to persuade the voters that we have economic competence."

For Major, the election is his first genuine mandate, and it gives him a chance to step out of Margaret Thatcher's shadow. With a secure, if sharply reduced majority of 21 seats in the House of Commons, the Prime Minister will be able to flesh out plans to create what he calls a "classless society." He hopes the higher standards and better management will improve such public services as education and health care. But he won't have much money to throw at projects: Britain is headed toward a budget deficit this year of \$49 billion, a staggering 4.5% of total output.

British voters also have dealt Major a strong hand for future negotiations with his European colleagues. His election runs counter to recent elections in France, Germany, and Italy, where disgruntled voters turned against the ruling parties. With much of Europe beset with jitters about grant schemes for economic and monetary union, Major's go-slow, pragmatic stance may gather wider support.

SECOND JOB. Britain will hold the presidency of the European Community during the final six months before the introduction of the single market. Major likely will use his tenure, which begins July 1, to push hard for deregulation of airlines and telecommunications and to try to whittle away at the proposed sharp increases in the EC's new five-year budget, not being drawn up. Major also is expected to join

with the U.S. government on such trade issues as cutting farm subsidies.

But Major had better not let the celebrating get out of hand. Along with economic woes, he must come to terms with growing demands for Scottish autonomy. What's more, the savage bombing attack in the City of London the day after Major's victory drove home the point that the Irish Republican Army has not gone away—and it reminds London's business elite that the island realm is a long way from solving all its problems.

By Richard A. Melcher in London



despite Labor leader Neil Kinnock's efforts to broaden its base. Kinnock's Apr. 13 announcement that he will resign upon the selection of a successor in July means that task will fall to either John Smith, a Scottish lawyer who is now the favorite, or Bryan C. Gould, a former Oxford University don.

HIS OWN MAN. Whoever gets the top job will be left with the task of relaxing the grip of the country's trade unions on the party, while convincing the country's electorate that Labor has a solid economic platform. Gavin H. Laird, secretary general of the powerful Amalgam-



A CATERPILLAR LOT IN PHOENIX: INVENTORIES WERE RUNNING LOW

MAYBE CATERPILLAR CAN PICK UP WHERE IT LEFT OFF

As markets recover, victory couldn't have come at a better time

It didn't take long for the United Auto Workers to crack after Caterpillar Inc. Chief Executive Donald V. Fites rolled out his big gun on Apr. 6. Fites had warned Cat's 13,000 striking workers that if they didn't return to work on that date, he would find permanent replacements for them. Just eight days later, union leaders agreed to send the strikers back on Cat's terms while the two sides keep bargaining.

The union's move is no less than a major victory for Fites. If he ultimately prevails with his contract demands, as now seems likely, Cat may not save much more in wages and benefits than it lost during the six-month strike. But it could steal a march on its rivals by reaping large productivity gains if Fites can avoid the tight job-security clauses demanded by the union. While the whole dispute could set back the company's six-year effort to set up high-performance work teams, the UAW now enjoys precious little leverage. And even before the union sent its members back to work, Fites seemed unconcerned. "We just want a contract that will enable us to be globally competitive," he said on Apr. 14.

TO START. The UAW, both at Cat and in Detroit, now has plenty to worry about. Its power to negotiate "pattern" agreements within industries has been wound sharply by Cat's ability to sidestep a

pattern deal based on the one the UAW struck last fall with Deere & Co. That figures to undermine the union's clout when it sits down at the bargaining table with the Big Three auto makers, whose labor pacts expire in 1993.

The UAW's retreat took many observers by surprise, since the picketers for the most part had held firm in their resolve to stay out. The company says about 1,000 workers had crossed the picket line by Apr. 14. The union puts the figure at less than 650. But union leaders gradually came to believe that they had miscalculated Fites's resolve to hire and train permanent replacements. "It was either go back to work or lose our jobs," says UAW Local 751 official Ronald W. Holliday. The UAW also was worried about a possible stampede by strikers once replacements arrived.

Fites probably can use the momentum to get his way in the negotiations, which are due to resume the week of Apr. 20 before a federal mediator. But any new

The UAW's Bieber asserts that comparing Cat to an auto maker is like 'comparing apples to russet potatoes'

contract may not generate much in the way of net savings for the company. To match the Deere deal, says Fites, Cat would have had to increase its average wage by 26%, to \$53,000 over three years. By contrast, the package he wants would limit the increase to 13%, or \$47,250. Frank Prezelski, an industry analyst at Rothschild Inc., estimates the reduced raises could save up to \$150 million over the life of a new contract. Fites believes that will allow the company to narrow the 25% wage advantage he says Japan's Komatsu enjoys over Cat. The UAW says that gap is only 6%. In any case, analysts think, Cat likely lost about \$100 million in the first quarter, largely because of the walkout.

Cat may save more by cutting jobs. Deere's contract guarantees the current level of jobs at the company. Cat's proposal would guarantee only that each UAW worker would keep his or her own job. Fites could scale down Cat's 16,500 UAW payroll by not replacing current workers when they leave. Over the next six years, Cat will be able to reduce its work force sharply as more than 60% of its UAW contingent becomes eligible for retirement. It may hasten the process by not recalling up to 15% of the strikers.

LITTLE TIME. For Fites—and for Cat's dealers—the victory couldn't have come at a better time. Dealer inventories were getting as low as one month on some items, and factories, staffed by managers and office workers, were struggling to keep up with orders. Now, just as construction markets begin to recover, Fites will have his first team back to staff his technologically advanced assembly lines. But while Cat won't have to shoulder the cost of training thousands of replacements, it may have to worry about what kind of quality a disgruntled work force will produce.

Meanwhile, the UAW doesn't have much time to regroup. Having staged the Cat strike partly to protect the principle of pattern bargaining, it must now prepare for next year's auto negotiations. Auto executives aren't talking, but UAW President Owen Bieber asserts that the Big Three won't try to emulate Cat's replacement threat. Comparing Cat to an auto maker, he says, is like "comparing apples to russet potatoes." Still, observers such as Wharton Business School management professor Peter Cappelli think that the carmakers now "will get tougher in negotiations."

Fites still has difficult bargaining ahead. But he is likely to get his way in the end. The news cheered Wall Street enough to bid up Cat's stock nearly 10%. No doubt, the strike hurt Cat. But now the company stands ready to do some damage to its competitors.

By Kevin Kelly in Chicago, with James B. Treece in Detroit

IT LOOKS AND FEELS AS IF APPLE LOST

Its copyright suit against Microsoft and HP may be all but over

Four months ago, Microsoft Corp. executives could barely bring themselves even to discuss losing the pending \$5.5 billion software copyright-infringement suit filed against the software giant by Apple Computer Inc. "I'll move to Canada if the judge decides" in Apple's favor, Microsoft Executive Vice-President Steve A. Ballmer vowed.

Well, Ballmer isn't packing his bags. In a surprise ruling on Apr. 14, Apple's four-year-old suit took a sudden, near-fatal turn. U. S. District Judge Vaughn R. Walker issued an oral ruling dismissing the bulk of Apple's claim that the "look and feel" of its Macintosh software was illegally duplicated in Microsoft's popular Windows and in Hewlett-Packard Co.'s NewWave.

The ruling took all of four minutes, but it'll reverberate around Apple much longer. Apple says it will ask Walker to reconsider. But others figure the Silicon Valley computer maker now has little chance of prevailing in its long and costly case. Crows Neil Boorstyn, an attorney representing HP: "We're within an inch of total victory." Says Microsoft counsel William Neukom: "It was a substantial step forward for us." Wall Street agreed. The day after Walker's ruling, Microsoft shares surged 11%, to 128%. The computer makers' investors didn't freak out at the news: Apple's shares closed at 60½, up 1¼, and Hewlett-Packard's ended the session at 82¾, a rise of 2½.

SHARP LIMITS. The bullish reaction may signal relief that the dispute is close to being settled for good—and that the industry finally has a ruling on one of its most divisive questions. Over the past 10 years, the courts have developed a substantial body of case law that delineates how far software developer can go in protecting their inven-

tions (table). Still needed was a major ruling on how much of a program's "look and feel," or appearance, is protected by copyright law.

Judge Walker's Apr. 14 opinion signaled that such copyright protection will be sharply limited. That could be good news for consumers. "This is critical to users because you don't want one sole vendor to be the gatekeeper of basic technology," says David Readerman, a

Shearson Lehman Brothers Inc. analyst.

The ruling, of course, doesn't mean that developers can't defend their technology. But to do so, they'll have to painstakingly detail what makes every feature of their program original. "The judge is saying that you'd better be specific," says Michael A. Epstein, a lawyer specializing in intellectual property at Weil, Gotshal & Manges. "You can't just argue the general gestalt."

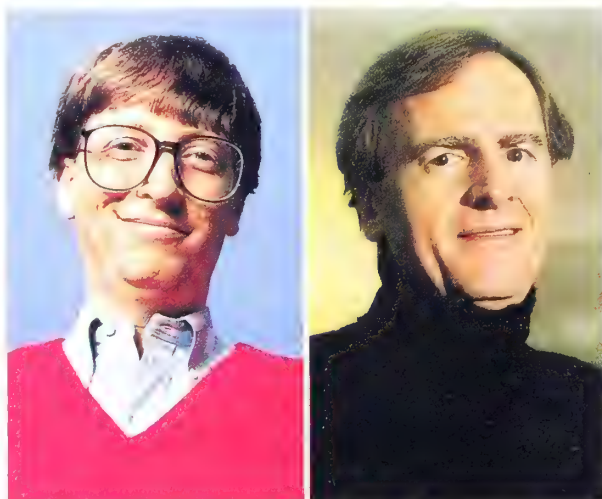
'NARROWED.' Apple isn't crying uncle yet, and Walker has scheduled two additional hearings. On May 12, the judge is set to consider whether there are other "substantial similarities" between Apple's software and the programs marketed by Microsoft and HP. And a June hearing will determine whether any of the parties should receive damages. Apple's general counsel, Edward B. Steac, says he remains hopeful the dispute will take a turn in his client's favor, but he concedes the case has been "substantially narrowed."

In its original suit, Apple claimed that nearly 200 features of its Macintosh software had been infringed by HP and Microsoft. As the case took its long and winding course, all but a handful of the disputed features were tossed out. Walker's latest ruling dispensed with Apple's claim that "overlapping windows," small windows of information that appear on computer screen to rest atop one another, infringed on its technology. They're crucial to development of new generations of software.

Now left to decide are 2 questions, including whether Microsoft infringed on Apple technology in its display of type and in the colors it chose for its Windows software. Apple's argument with HP is even more narrow: Walker will have to rule whether HP can use a trash-can icon as a way to delete computer files, an image Apple pioneered.

Because so little remains in dispute, attorneys for Microsoft and HP say it will be the most impossible for Apple to revive its case. That means that Silicon Valley's best and brightest can finally get out of the courtroom and back to the development labs.

By Kathy Rebellio in San Francisco, with Michele Galen and Evan I. Schwartz in New York



MICROSOFT'S WILLIAM GATES VS. APPLE'S JOHN SCULLEY: THE ISSUE OF A PROGRAM'S APPEARANCE MAY SOON BE SETTLED

HOW SOFTWARE COPYRIGHT LAW IS DEVELOPING

Key legal precedents:

ATARI VS. PHILIPS CONSUMER ELECTRONICS (1982) Software makers cannot copy the graphic icons of a program or game

APPLE VS. FRANKLIN (1983) Software developers may write compatible programs, but not by copying the original line-for-line

WHELAN VS. JASLOW (1984) Even if it's not cloned line-by-line, the basic structure of a computer program cannot be copied

DIGITAL COMMUNICATIONS VS. SOFTKLONE (1987) A separate copyright is needed to sue for infringement of software's appearance. In 1988, the copyright office disagreed

LOTUS VS. PAPERBACK (1990) Software makers can't clone screen layouts, menu structures, or command organization

FEIST VS. RURAL (1991) The amount of labor and money used to compile data doesn't prove originality, the Supreme Court ruled

APPLE VS. MICROSOFT AND HEWLETT-PACKARD (1992) Copyright protection can't be based on "look and feel," but must specify what elements are protected

DATA BW

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for measuring banks:
Moody's, S&P's and our clients'.



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SAY WHAT, MR. RODGERS?

Cypress' slump may keep its outspoken CEO quiet a while

Cypress Semiconductor Corp. Chairman T. J. Rodgers has always fancied himself a spokesman for free enterprise in Silicon Valley. He led the charge against calls for the U.S. government to prop up chip companies. He railed against the Sematech semiconductor research group, and his congressional testimony in 1989 helped kill U.S. Memories, a proposed consortium of high-tech giants seeking antitrust exemption in the memory-chip business.

With sales of \$287 million, Cypress is a pip-squeak. But Rodgers was taken seriously because his company was so successful. When Cypress went public in 1986, sales were just \$17 million, and profits were nonexistent. By the time Rodgers went to Washington, earnings were growing by 33% a year. By 1991, the stock had reached a high of 23%.

Now, even as the market for chips is on the verge of a cyclical recovery, Cypress has hit hard times. On Apr. 13, it reported that first-quarter profits, at \$3.9 million, were 57% below the year-ago quarter. That news followed a plunge in fourth-quarter profits of 28%. These days, Cypress' shares trade around 10.

Wall Street analysts, surprised twice by bad news, are pulling their "buy" recommendations and halving their full-year 1992 forecasts to about 50¢ a share (chart). "Maybe I'm overkilling it, but I've been a little optimistic too long," says Hambrecht & Quist Inc. analyst Mel Phelps.

MUCKING ABOUT. As might be expected, some of Rodgers' foes are gloating about his bad news. "I sure wouldn't want to kick a man when he's down," says a Sematech spokesman, his sincerity measured by the volume of his laughter. Rodgers now needs to engineer a quick turnaround—partly for his own reputation. "If we mire down in the muck where we are, it will erode my ability to speak out about the industry," he notes.

Getting out of the muck might be a bit of a problem. The company receives about 15% of its revenue as a major supplier of "Spare" processing chips for Sun Microsystems Inc. workstations. But Sun this year has been aggressively trimming inventories, and it has cut its

orders to Cypress by as much as 40%.

To keep revenues up for the quarter, Rodgers pumped out more high-speed "SRAM" memory chips, Cypress' original product, through its factories instead. But margins are thinner than thin on those chips. That cut badly into the quarter's profits.

Rodgers, 44, is known for exceptional management skills and pithy inspirational mantras. One management motto: "Be realistic—demand the impossible." But he blames a big chunk of the fourth-quarter shortfall on a mundane bottleneck in the company's chip-testing area that left chips trapped in storage bins. "That was clearly my fault," Rodgers admits.

GIANTS KILLER. Now, it looks as if Cypress can't return to its former health until fall, Rodgers says. It will take that long to make the transition to higher-margin, bigger-memory chips. Later this year, a new version of the Spare processor, called Pinnacle, is due. Designed to be used in a line of upcoming Sun workstations, Sun hasn't committed to

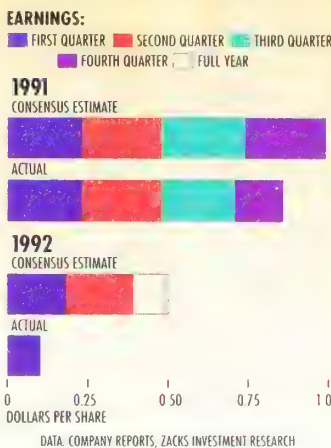
Pinnacle and may instead use Texas Instruments Inc. chips. Asked how Sun's decisions will affect Cypress' bottom line this year, Rodgers shakes his head and throws a pair of imaginary dice across the table.

In the face of uncertainty, Rodgers is reemphasizing cost control at a company already running a lean as Sparta. So far, he has imposed a hiring freeze and capped salaries. But Rodgers insists he won't shirk on the 25% of sales Cypress spends on research and development.

Meanwhile, Rodgers will keep speaking out. He can't help himself. He's pushing his version of a capital-gains tax cut: heavy taxes for short-term equity holders, no taxes at all for long-term investors. And he's protesting a plan to raise taxes to move the San Francisco Giants to San Jose, Cypress' hometown. But until Cypress gets its act together, you probably won't hear Rodgers bawling the chip industry establishment. Not much, anyway.

By Russell Mitchell in San Jose, Calif.

CYPRESS IS DASHING WALL STREET'S HOPES



DEALS

A QUICK PICKER-UPPER FOR DR PEPPER

The \$600 million IPO ought to ease its cash bind and revive marketing

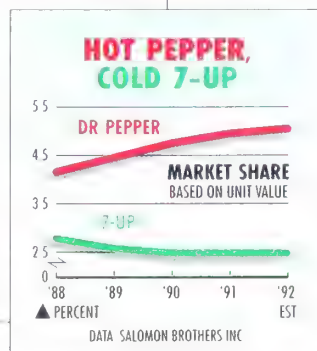
Before Dr Pepper and 7-Up joined forces five years ago, they were bit players in an industry dominated by Coca-Cola Co. and PepsiCo. But together, the merged companies are the No. 3 soft-drink outfit in the U.S. Now, if Dr Pepper/Seven-Up Cos. can succeed with an initial public offering, its bigger rivals might even be deflected a bit from their head-to-head combat.

The planned late-April offering of 50 million shares, co-managed by First Boston, Paine-Webber, and BT Securities, could raise \$600 million or so, good for a 30% stake. That would ease worries about the Dallas

company's finances, with cash left over to crank up its marketing.

Will the market make Dr Pepper feel welcome? Wall Street doesn't seem to have the appetite for IPOs it did a couple of months ago. But the company's improving results could grab investors' attention. Although Dr Pepper last year posted a net loss of \$37 million, as a result of a debt restructuring charge, operating profit rose 12%, to \$138 million on sales of \$601 million. Salomon Brothers Inc. analyst Edward Mall figures sales will to \$650 million this year.

Those numbers, however, mask the diverging



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	Buick Regal Gran Sport	Lexus ES 300
Engine	3.8-litre V6	3.0-litre V6
Transmission	4-speed automatic (std)	4-speed automatic (std)
Touring Suspension	4-wheel independent	4-wheel independent
Brakes	Anti-lock disc	Anti-lock disc
Wheels	16" aluminum alloy	15" aluminum alloy
EPA Est. MPG	18 city/28 hwy	17 city/23 hwy
M.S.R.P.*	\$21,240	\$26,150

*Manufacturer's suggested retail price including dealer prep. Destination charge, tax, license and options additional. Levels of equipment vary.
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fortunes of Dr Pepper and 7-Up, the two flagship products. The company's sales gains last year came mostly from Dr Pepper and from reformulated and re-packaged Diet Dr Pepper. The diet soda's volume soared 120%, to a 0.9% share of the market.

Such impressive strides will be harder to come by this year. Coca-Cola's Mr. Pibb, which has a tiny 0.2% share of the soda market, is aiming straight at Diet Dr Pepper with its Diet Mr. Pibb, which has also been newly reformulated and repackaged.

The 7-Up unit hasn't matched the gains at Dr Pepper. Sales of 7-Up products dropped 4% last year. Part of the problem has been management. For

more than a year, 7-Up was without a chief operating officer—until 25-year industry veteran Francis I. Mullin III, a former Cadbury Schweppes executive, came aboard last April. His biggest challenge: countering Coca-Cola, whose Sprite, back in 1986, took away 7-Up's longtime position as the leading lemon-lime soft drink.

'UNCOLA.' A successful IPO could put the fizz back in 7-Up. A recapitalized Dr Pepper could cut annual interest payments by more than 60%, from last year's staggering \$148 million, figures Jay Van Ert, a portfolio manager at T. Rowe Price Associates Inc. in Baltimore. The freed-up cash is likely to go straight into marketing.

The biggest new marketing initiative actually is an old one: 7-Up is staging a revival of its "Uncola" campaign, a huge success in the 1970s. It plans to spend \$30 million on the effort this year. On Apr. 1, the company unveiled a new Diet 7-Up.

Already, 7-Up is regaining momentum. Shipment volume rose 8% in the first quarter. Says Jesse Meyers, publisher of *Beverage Digest*: "7-Up is stabilizing now and should have no problem shoring up whatever weaknesses it still has." If he's right, Dr Pepper/Seven-Up may soon be enough to make even Coke and Pepsi burp.

By Stephanie Anderson Forest in Dallas with Walecia Konrad in Atlanta

AIRLINES

SURE, THEY'RE SIMPLER, BUT...

Under air carriers' new rate structures, many fares will rise

American's Anytime fares. United's Fair Fares. TWA's Friendlier Fares. Whatever the airlines call them, their slimmed-down fare structures share a common promise: simplicity and substantial savings.

But before you succumb to the hype and rush out to buy a vacation ticket to your own private Idaho, remember that the biggest fare cuts are for the wingtip crowd buying full-fare tickets. For the sneaker set headed for Aunt Maude's in Moline, simple does not always translate into savings. "The whole idea of fare simplicity has been oversold," says Ed Perkins, editor of *Consumer Reports Travel Letter*. "Complexity has been good for consumers because it brought them a range of discount options that only a complex system can offer."

BIG LURE. Indeed, while American Airlines Inc. is dropping full fares by 38%, many of its cheapest leisure fares will rise slightly—some, substantially (table). One reason is that American is eliminating superlow "sale" fares in markets such as Columbus, Ohio, as it seeks to charge comparable rates for trips of comparable distance. And with American's new fare structure, the old 30-day advance-purchase fare disappears. Now, the best fare will be a 21-day ticket that's more flexible, but sometimes more expensive. The 21-day fares are roughly half the new full-coach prices, while a 7-day advance ticket goes for about \$20 to \$60 more than that. Both require Satur-



AN AMERICAN TICKET COUNTER IN NEW YORK: GONE ARE DISCOUNTS FOR CHILDREN AND SENIORS

leisure travelers may be American's new rule allowing changes to nonrefundable tickets for a \$25 fee. The fee is payable if you want to change your travel dates or scrap the trip entirely and apply the value of your ticket toward a different itinerary. There's no fee, though, if you wish to fly standby for a different flight on the same day as your ticketed flight.

Most of the major carriers have embraced American's general fare plan. But since the industry's small fry are continually dreaming up deals to undercut the Big Three, it's still wise to shop around. Ailing Trans World Airlines Inc. is matching the major carriers' cheapest 21-day fares with its own that require

only a 14-day advance purchase. American West Airlines Inc. undercuts the majors' discount fares on transcontinental trips and those to Hawaii. And Southwest Airlines Co., which provides no frills service at rock-bottom prices in about a quarter of the country, is offering a kids-fly-free program this summer **SPECIAL DEALS.** Unfortunately, some of the deals so close to the hearts of non-business travelers are biting the dust. American has scrapped special discount for children, senior citizens, the military and bereaved families. "With the lower fares and the ability to reuse a ticket after paying the \$25 fee, there wasn't need for those fares anymore," says an American spokesman.

Maybe not. But for those willing to do a little spadework, there will always be special deals. Tom Parsons, publisher of *Best Fares* magazine, notes that consumers who join Pace Membership Warehouse's travel club get two travel certificates, worth up to \$65 each, toward flights on American. Videotapes of *Home Alone* allow consumers to purchase certificates from American, worth up to \$50 each. Keep your eyes peeled and you'll have no excuse not to visit Aunt Maude.

By James E. Ellis in Chicago

THESE ARE PRICE CUTS?

American's lowest round-trip fares
as of Apr. 10, 1992*

	Old fare	New fare
NEW YORK TO LOS ANGELES	\$398	\$460
WASHINGTON TO COLUMBUS	120	190
CHICAGO TO PHOENIX	328	370
NEWARK TO KANSAS CITY	338	340
CHICAGO TO ORLANDO	298	290

*Varying fare requirements are sometimes not comparable under old and new fare plans

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MY KIND OF TOWN (GLUB), CHICAGO IS

The city's freak flood points up the need to fix aging infrastructure

At street level, there is very little evidence that Chicago is struggling with one of its worst disasters ever. In most places, in fact, roads and sidewalks are bone-dry. But 20 feet below, surging waters have created a catastrophe. Indeed, since its start in the early morning of Apr. 13, the freak flood has wreaked havoc on Chicago business—causing millions of dollars in damage and bringing daily commerce to a soggy halt.

At the geographic center of it all is the venerable Chicago Board of Trade, the world's oldest and largest futures exchange and the city's financial anchor. Normally, the board's executive committee meets daily at 6 a.m. in the wood-paneled office of the exchange's president, Thomas R. Donovan. But on Apr. 14, the committee convened instead at the edge of a 20-foot-deep pit dug into LaSalle Street. As they watched, water from the Chicago River streamed into the Board of Trade's basement at the rate of 80,000 gallons an hour. "This isn't going to be capped today," Donovan muttered.

How right you were, Mr. Donovan. By day's end, the water was still rising in the board's basement by as much as 10 inches an hour. Indeed, it could be months before Chicago is back to normal and the costs of the disaster, which began when the Chicago River broke through an underground freight-tunnel system, can be accurately measured.

'TAX TRIAGE.' The cleanup may involve a lot more than washing out waterlogged basements. Insiders at the Board of Trade, for instance, say they are concerned that they will be held financially liable for flood-caused delays in clearing trades. The board was forced to shut down all trading at 10:45 a.m. on Apr. 13, holding daily volume of \$130 billion hostage to the rising waters. Because of continued flooding and electrical outages, trading didn't resume until Apr. 15—and then only with a schedule of abbreviated sessions.

Competing markets, meanwhile,

picked up much of the board's lost business—maybe for good. During its Apr. 15 session, for instance, trading in U.S. government bonds on the London International Financial Futures Exchange tripled to 7,000 contracts. "Our market position can be very fragile," says a nervous Donovan.

For accounting firm Arthur Andersen & Co., the real costs could be in delayed work. The flood began at the worst possible time for the world's largest accounting firm: two days before the Internal Revenue Service's Apr. 15 tax-filing deadline. At 8 a.m. on Apr. 13, the firm's entire 500-person Chicago tax

group was forced to evacuate its downtown building. A special team that night packed nearly 900 boxes of tax material by flashlight, so that they could be moved to buildings on drier land. It was a process that Barry R. Wallach, the partner in charge of the Chicago tax practice, called "tax triage."

The Internal Revenue Service said it will grant flood-affected taxpayers an extra week to file. But there's no such helping hand for State Street retailers who normally attract thousands of shoppers each day during the week before Easter. Marshall Field & Co.'s flagship downtown store, in fact, may not reopen until the holiday has come and gone—despite the team of consultants and insurance reps the retailer has working on the problem.

TIME OFF. Neighboring Filene's Basement, the Boston-based company that made below-ground retailing fashionable, lost two floors of inventory. Company executives flew in to assess the damage to merchandise in a store that opened just last October. Says Filene's President Jim Ananthar "It's totally ruined."

At First Chicago Corp., much of the damage was contained early. The company's 14-person crisis management committee met four times on Apr. 13 alone. In a war room replete with televisions, city maps, and dedicated telephone lines, bank executives orchestrated movements of 7,000 workers spread throughout 10 downtown buildings. Options specialists flew to New York and London late that night, in case the bank's Chicago trading floor lost power, and the bank's computer files were transferred electronically to backup locations in the suburbs.

While the city tries to figure out a way to plug the giant hole under its streets, thousands of workers have some unexpected time off—for many of them, unpaid.

As far as Illinois Governor Jim Edgar is concerned, the temporary shutdown of Chicago's business center was a sobering lesson in the trade-offs necessary during the fiscally troublesome 1990s. "Infrastructure is something we've got to worry about," Edgar says. "You bring down the defense budget, where do you want to put the money, into social programs or into infrastructure?" The business executives in the Loop, the argument for infrastructure just got a lot stronger.

By David Greising and Julie Flynn in Chicago



State Street retailers had no contingency plans. A closed Marshall Field lost much of its Easter business



Satellite Map Source: National Air Survey Center, Corp.

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EDITED BY HARRIS COLLINGWOOD

THE FLORIST'S LIFE: NO BED OF ROSES

Real estate broker. Leveraged-buyout specialist. Thrift executive. All jobs that looked a lot more promising when the roaring '80s were in high gear. Here's another title to add to that list: Florist. Sales of flowers have leveled off, but the competition hasn't

FLOWER SALES

	1982	1990	1991
Billions	\$5.7	\$12.9	\$12.8

NUMBER OF FLOWER SHOPS

	1977	1987
Thousands	29.3	49.5

CUSTOMERS/PROSPECTS

	1972	1990
Per flower shop	8,567	6,135

SHARE OF FLORAL MARKET

	1981	1991
Florists	63%	58%
Nonflorists	37%	42%

DATA: SOCIETY OF AMERICAN FLORISTS

IS COLLEGE BOUND BOUND FOR TROUBLE?

► The Securities & Exchange Commission turned up the regulatory heat on College Bound on Apr. 7 by going to court to seek records from the Florida test-preparation company. The SEC's court papers said it suspected College Bound's "officers, directors, and others" of filing false financial reports, manipulating the company's stock, and misstating the scope and profitability of its business. "The company denies any wrongdoing, is complying with the SEC request, and will continue to comply to try and get this thing cleared up," says a company spokesman.

RUSSIA ISN'T THE ONLY REPUBLIC IN NEED

► While the industrial world's treasuries scramble to come up with \$18 billion that President Bush promised in aid for

Russia, the International Monetary Fund presented another bill: The 14 other republics of the former Soviet Union will need an additional \$20 billion in financing over the next year. IMF Managing Director Michel Camdessus announced on Apr. 15 that all the republics but one were cleared for IMF membership, with Azerbaijan stalled only by missing paperwork.

The IMF and World Bank will put up about a fifth of the funds needed to balance the new members' international payments. But that will leave a big gap to be filled, both by aid from the Group of Seven industrial nations and the European Community and by rescheduling the debt that republics owe to banks and other governments.

NOT ENOUGH BACON FOR HORMEL'S HEIRS

► After seeing the value of their inheritance dwindle by \$175 million in the past year, the heirs to the Hormel meat-packing fortune want to dump most of their 37.5% stake in the Austin (Minn.) company. On Apr. 14, the three grandsons of company founder George Hormel filed suit to force the Hormel Foundation, which manages their inheritance through 12 trusts, to diversify into other investments. The foundation, which earlier this year re-

CHEESE AND SYMPATHY

The first time a company turned you down for a job, despite your impressive resumé and qualifications, some well-intentioned soul probably told you the rejection would build character. To which you replied, with understandable impatience, that character doesn't make much of a meal.

It does now. In the latest advance in recession marketing, Domino's Pizza has declared April "Eat Your Rejection Letter Month." Customers presenting Domino's with a rejection letter from a prospective employer will get a dollar knocked off the price of a pie.

This isn't the first time the pizza company has made the best of bad economic news. After the collapse of a state insurance fund made it impossible for many Rhode Island thrift depositors to touch their money, Domino's started accepting \$ checks drawn on the shuttered institutions. Wisely, the company has no plans to accept checks from the House bank.



buffed suggestions by George II, Thomas, and James Hormel to reallocate investments, is expected to oppose their action vigorously.

A MCGRAW PROMOTED AT MCGRAW-HILL

► McGraw-Hill has made Harold W. McGraw III the principal deputy to Chairman Joseph Dionne. McGraw, who keeps his title as executive vice-president for operations, will now, in effect, serve as the company's chief operating officer, overseeing, among other holdings, BUSINESS WEEK, Standard & Poor's,

four television stations, and an educational-publishing arm.

McGraw had split those responsibilities with Executive Vice-President Walter Serwatka, who has resigned. The company also reported that first-quarter net jumped 11.6%, to \$14.1 million, on a 6.2% rise in revenues, to \$45 million—in part, because of robust results at S&P and improvement at BUSINESS WEEK.

FORD IS BULLISH ON NORTH AMERICA

► Making a close relationship closer, Ford is negotiating to buy 50% of Mazda's assembly plant in Flat Rock, Mich. Mazda has invested more than \$550 million in the factory but faces a slowing market and softer profits in Japan.

For Ford, the planned purchase comes in tandem with an Apr. 13 announcement that it will invest almost \$3 billion in North America over the next three years to produce new minivan, develop new light-truck engines, and expand a truck plant. Ford's investment contrasts sharply with Chrysler's sale last year of its half-interest in the Diamond-Star Motors plant to partner Mitsubishi Motors.



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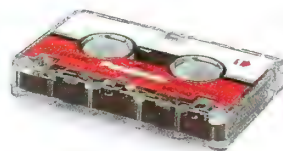
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GOING BALLISTIC OVER A FRENCH BID FOR A MISSILE MAKER

Thomson-CSF officials didn't pop champagne corks after a New York bankruptcy judge declared the French electronics company the winner of a tense, three-day bidding for LTV Corp.'s missile and aerospace business. Instead of celebrating, the winners girded for a second, and perhaps fiercer, fight on Capitol Hill.

As military spending shrinks, a worldwide consolidation of the defense industry is inevitable. But the sale of a well-known U.S. defense contractor to foreign interests remains a touchy subject. And the French government's 60% stake in Thomson-

doesn't increase the company's popularity. Egged on by the politically well-connected losing bidder, a joint venture Martin Marietta Corp. and Lockheed Corp., key House and Senate members are calling on the Bush Administration to block the sale, which still must be approved by the Committee on Foreign Investment in the U.S. (CFIUS), an interagency review panel headed by Treasury Secretary Nicholas F. Brady.

TEFUL SUITORS. "The game is far from over," warns Senator Frank H. Murkowski (R-Alaska), vice-chairman of the Senate Intelligence Committee. While Congress has no direct power to block the sale, Murkowski and Intelligence Committee Chairman David L. Boren (D-Okla.) wrote President Bush in March opposing the Thomson purchase. More than 70 other lawmakers have expressed concern about the deal, which would give Thomson the LTV missile business and Washington-based partner Carlyle Group would get LTV's aircraft-parts business. And Senator Daniel K. Inouye (Hawaii), chairman of the defense appropriations subcommittee, will try to block the Defense Dept. from awarding contracts to foreign government-owned companies.

The sale of LTV's defense unit, with 1991 sales of \$1.7 billion, is key to the Dallas-based company's efforts to emerge from

Chapter 11 bankruptcy. LTV creditors favored Thomson's \$450 million offer over the \$385 million Martin-Lockheed bid. But the rejected suitors aren't bowing out quietly. Martin Chairman Norman R. Augustine and Lockheed CEO Daniel M. Tellep charge that Thomson's purchase is tantamount to "foreign-government nationalization" of a chunk of the defense industry. The executives plan a personal lobbying blitz in an effort to reverse the Thomson sale. They'll play on fears that foreign government-owned contractors are unfair competitors, and they're winning a receptive hearing.



MARTIN MARIETTA CHAIRMAN AUGUSTINE

EXAGGERATED FEARS? Others worry that the Thomson purchase could erode Washington's ability to control sensitive technology. "The purchase of such American secret and advanced technology by any foreign government or company... could be harmful to the best interests of the U.S.," says ranking House Armed Services Committee member William L. Dickinson (R-Ala.).

Thomson officials insist such fears are overblown. They note that foreign companies, including France's Matra and Britain's Ferranti International PLC, have already acquired U.S. defense contractors. "It's not unusual to have a foreign-owned company involved in classified military production," says Thomson spokesman Richard J. Keating. Thomson's U.S. unit is a subcontractor on classified projects. And it will have U.S. directors oversee secret work.

The Administration, which welcomes foreign investment, may take the political heat and give Thomson the go-ahead. In nearly four years, CFIUS has extensively reviewed just 13 of 700 foreign acquisitions, and only one—a deal involving China—was blocked by the President. But in an election year, when "America for Americans" sentiment is running high, Thomson may find that the political winds can be fickle.

By Amy Borrus, with Jonathan B. Levine in Paris

CAPITAL WRAPUP

SECURITIES

Edward H. Fleischman, who resigned from the Securities & Exchange Commission in a huff in March, may get the last word in a long-running feud with Chairman Richard C. Breeden. Two Coopers & Lybrand accountants have asked a federal court for help in investigating the circumstances under which the SEC failed to overturn sanctions against them. They want to probe allegations, first raised in a Feb. 10 BUSINESS WEEK article, that Breeden held up a review of their insurance until the departure of Commissioner Philip Lochner Jr., whose vote was the deciding one for lifting sanc-

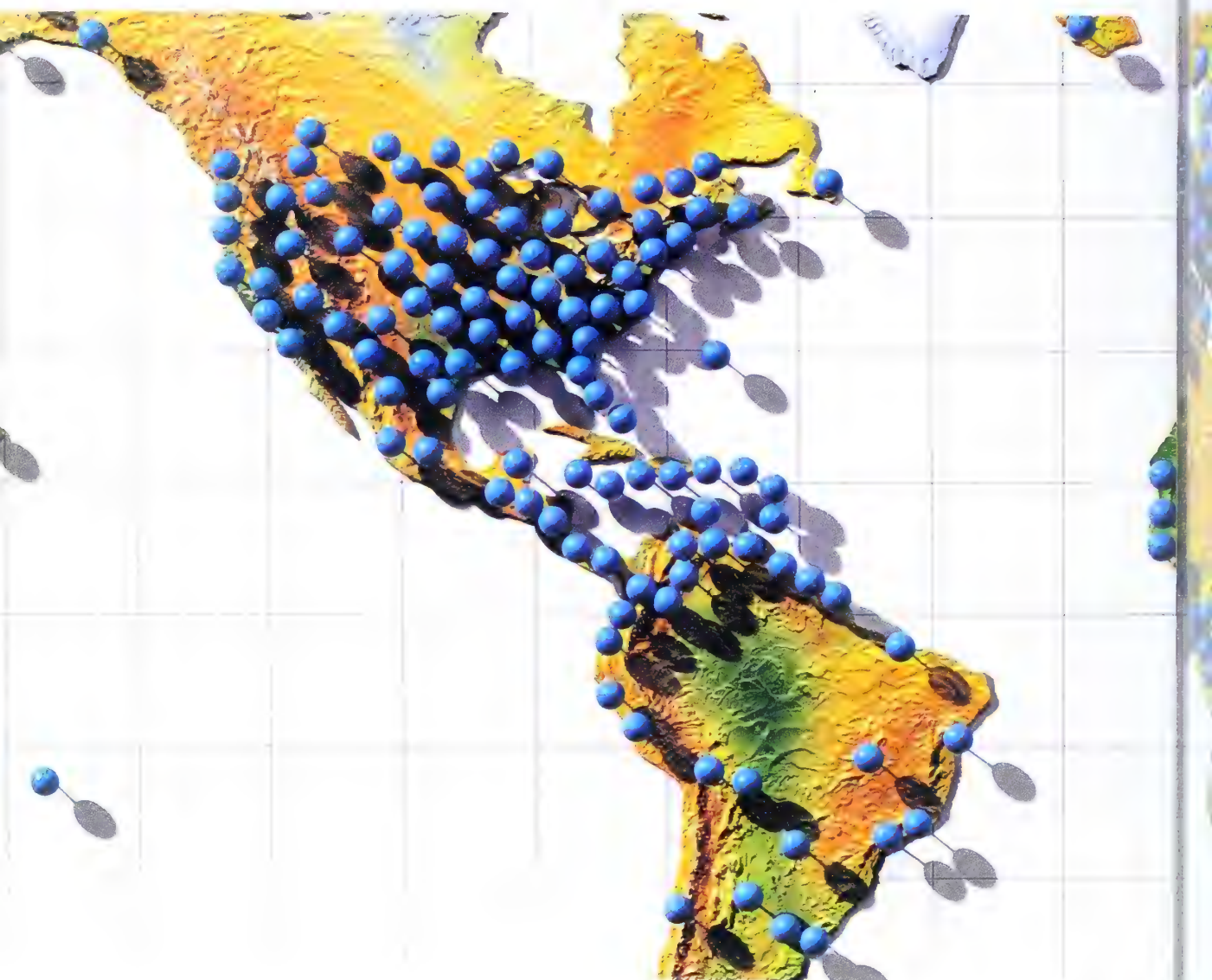
tions imposed by an administrative law judge. The commission has never formally acted on the review request.

The SEC opposes the accountants' request for an order forbidding destruction of relevant documents. But Fleischman may be ready to challenge the official version. In a letter to Judge Louis F. Oberdorfer of U.S. District Court in Washington, Fleischman says he disagrees "with the arguments made and conclusions presented to you on behalf of the commission." But Fleischman declined to put his objections on the record because he wants to preserve the confidentiality of SEC proceedings. One possibility: He'll go into details in a closed hearing.

CONGRESS

For the large number of senators and representatives retiring—or being retired—this year, the 1990 congressional pay raise will be the gift that keeps on giving. Lawmakers' generous pensions are based on average salary during just the last three years of service, so the 40% pay hike will have a big impact on their annual benefits. For example, retiring Representative Frank Annunzio (D-Ill.) will get a pension of \$74,000 a year. Had he quit in 1990, he would have got only \$54,000. A 50-year-old member with 20 years' service, including time spent as a staffer, can retire on half-salary.

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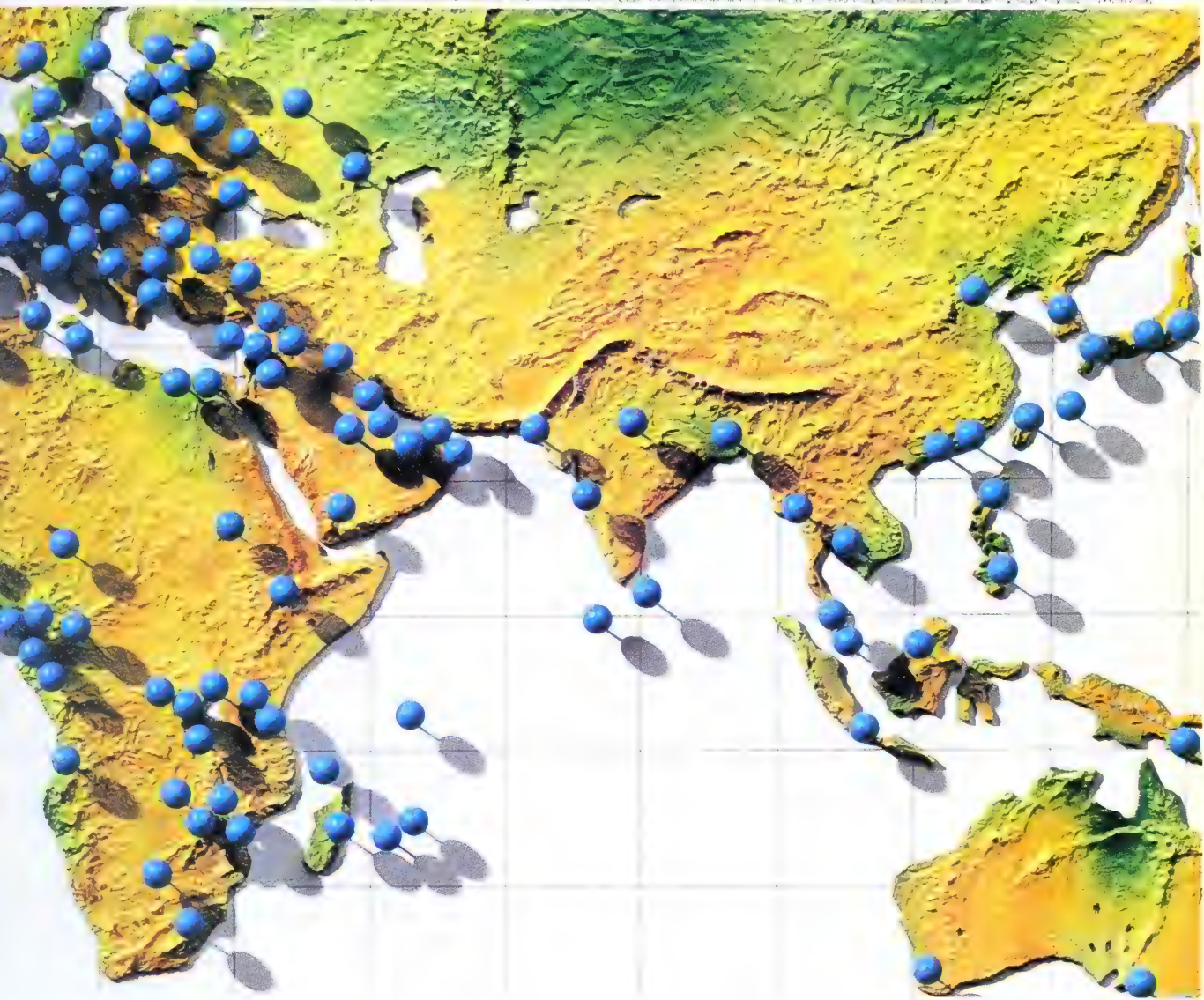
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SHOCK WAVE THE PLUNGE OF THE NIKKEI STOCK AVERAGE GAVE THE COUP DE GRACE TO THE 'BUBBLE ECONOMY'



RECORD HIGH
DEC. 29, '89
38,985.87

JAN. 4, '91
30,243.66

NIKKEI STOCK AVERAGE

JAN. 4, '88
71,317.94

JAPAN FOLLOWS THE NIKKEI UP... AND DOWN

JAN. 5, '87
18,820.55

JAN. 9, '86
13,034.29

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JAPAN

WILL IT LOSE ITS COMPETITIVE EDGE?

Matsushita Electric Industrial Co. is a paragon of Japanese industrial might and a citadel of management. With sales last year of \$49.6 billion, it's the world's largest supplier of consumer electronics and a giant in factory automation. Nobody outmanufactures Matsushita.

Yet at its sprawling, flower-festooned headquarters in western Osaka, there's tension in the air—and talk about entering a new era. With profits down by half, its balance sheet stretched by the \$6.6 billion acquisition of MCA Inc. in 1990, and the cost of money rising, Matsushita is being forced to rethink the very way it does business.

Several top executives have just been demoted or suffered hefty pay cuts for a finance subsidiary's sins during Japan's go-go years. Bosses are planning to slash subsidies and cut loose the 27,000 *keiretsu* retailers that sell only Matsushita goods. Once one of Japan's premier new-product churners, Matsushita now is streamlining. It's eliminating low-end cassette and CD players. It's shelving plans for more billion-dollar Universal Studios theme parks in the U.S. and Europe. And it's cutting working hours and overtime at home. "Matsushita is at a turning point, and so is Japan," says Masahiro Kosaka, a laboratory director. "I don't think things will ever go back to the way they were."

AFTERSHOCKS. Matsushita is but one of hundreds of Japanese companies grappling with the aftershocks of a stock market crash that has wiped out \$2.6 trillion in value on the Tokyo Stock Exchange and ushered in a recession (charts). Thanks to the runup of shares and real estate prices in the late 1980s, Japanese managers enjoyed several years of virtually free money. Now they are being jolted awake to a new

reality: Money has a cost, so profits count. "In the bubble economy," acknowledges Citizen Watch Co. President Michio Nakajima, "Japanese companies lost their way."

The new mood could cause a sea change in how Japanese run their companies. It could also begin to erode Japan's global edge. Even before the bubble, of course, many Japanese companies were fierce competitors—and they will continue to be, especially as they try to boost exports to offset weak demand at home. But with restive investors demanding higher earnings and fatter dividends, companies may no longer be able to wage their battles for market share at any cost. That could force them away from the product proliferation, marginal business ventures, and headlong capital investment that have struck fear in the hearts of their competitors worldwide.

As a result, companies in the rest of the world may actually enjoy a breather for a while.

With the end of cheap money, the excesses of the bubble economy have already disappeared among individuals. Japan's *nyuu ritchi*—the new rich—have stopped indulging in million-dollar golf-club memberships and \$500 cups of exotic coffee. Now, it's industry's turn to come off the binge. After spending \$3 trillion on new plant and equipment in the late 1980s and another \$500 billion on research and development, many companies are hitting the brakes. Acknowledges NEC Corp. Financial Manager Keiichi Yoshida: "Because money is costlier, we're getting tougher on capital investment decisions."

Look at what's happening already. Fujitsu Ltd., whose pretax profits fell an estimated 37% in the latest fiscal year, is withdrawing from the crowded U.S. facsimile market, cutting capital



spending by 20%, and slashing executive pay by up to 35% for the next six months "to create a sense of crisis within the firm," says a director. Hitachi Ltd., whose pretax profits are down by nearly half, is taking similar steps.

In the name of better profitability, Honda Motor Co. and Nissan Motor Co. are extending some product cycles. And Japan Airlines Co. is thinking of moving administrative workers into sales and passenger service jobs. "A lot of companies were benignly paternalistic when times were good," says a manager. "There's a need for a more tyrannical approach."

GIANT HOLE. To understand Japan's predicament, look at what happened to America in the gas-guzzling days of the 1950s and 1960s. Cheap oil made America complacent, Japanese used to lecture, as they proceeded to drive a giant hole through the American market.

Today it's Japan's turn. Cheap money destroyed any sense of price in Japan. By riding favored stocks and by borrowing against land, consumers (page 58) became instant yen millionaires—and often dollar ones, too. Corporations were even more reckless, overpaying wantonly for overseas properties that are now albatrosses. Giddy banks and their affiliates eagerly lent piles of yen to unsavory speculators and even gangsters (page 56). So far, \$215 billion worth of those loans has gone bad. One obscure restaurant owner managed to borrow \$3.2 billion, mostly from Industrial Bank of Japan Ltd., using phony CDs for collateral.

None of this means a fundamentally weak Japan. Its diligent, highly skilled, and fully employed work force still clocks in by 9 a.m. every day. With elegantly dressed and coiffed consumers still enjoying real income gains of 3%, Tokyo's glittering Ginza feels as affluent as ever. Government budgets are in surplus, and many big companies still are bulging with cash built up during the bubble years. In fact, their gleaming state-of-the-art factories will help keep industry competitive for quite a while. When the global economy starts to recover, argues Columbia University Japan expert Hugh T. Pat-

rick, "the investment boom of the past five years will pay off."

But Japan is experiencing a comeuppance nonetheless. Evaporating fast is the myth of an invincible Japan where the Imperial Palace grounds were said to be worth all of California, where omnipotent bureaucrats could solve any problem, where share prices could never crash, and where banks could gallantly rescue any customer.

This financial shock is hitting just as workers are seeking more leisure. That alone is raising labor costs and will make it even harder for companies such as Toshiba Corp. to put 22 largely identical models of microwave ovens

well. Although the government has stubbornly stuck to a forecast of 3.5% growth for the current fiscal year ending next Mar. 31, most private economists see 1% to 2% growth at best. And Chief Economist Tetsuo Tsukamura of Smith Barney, Harris Upham International Inc. sees GNP falling 0.8% for the year (page 54). That would be Japan's poorest showing since the oil shock recession of 1975.

BOND OVERHANG. The slowing economy isn't the only pressure on Japan Inc. As price-earnings ratios have tumbled and interest rates climbed toward world levels, scores of corporations are finding they must pay a far higher price for new funds. Many, including NEC, TDK, and Toshiba, soon will have to repay some \$160 billion in cheap bonds issued during the Tokyo Stock Exchange's headier days. At the time, investors gladly accepted yields of 1% or less because they were guaranteed the right to convert their bonds into stock at what seemed bargain prices. But now that the companies' share have tanked, investors want only cash. To pay bondholders off, corporations are either having to dip into their reserves or borrow new funds at up to 6%.



RICE BELT REZONING URBAN AGRICULTURAL LAND FOR HOUSING WOULD SPUR DOMESTIC DEMAND

on the Japanese market with little regard for profits. Cutting back on such wasteful practices could level the playing field of world trade. But for now, many manufacturers are reverting to form and pumping up exports to keep their factories working.

Tokyo posted a huge \$11 billion trade surplus in March on top of a \$10 billion one the month before, and forecasters believe the surplus could reach \$120 billion for all of 1992, up 40% from last year. DRI/McGraw-Hill economist David Blond expects sales of Japanese semiconductors, computers, autos, and machinery all will record hefty overseas sales gains.

The export surge is likely to spark new trade frictions between Japan and its trading partners. Worse yet, even record-high overseas sales won't be enough to keep Japan's \$3 trillion economy out of recession. Gross national product fell at an annual rate of 0.2% in the fourth quarter and probably declined in the first quarter as

The cash squeeze is beginning to slow the march of Japanese companies abroad. Japanese investment in Britain, long a favored jumping-off spot for the European Community's planned free-trade area, has fallen significantly in the last six months. British officials say only 21 Japanese companies built plants there last year down from 35 in 1990. So far this year just two have opened.

The U.S. also may be seeing a slow down in transplant investment. Because of a weakening U.S. market Mazak, the U.S. arm of machine-tool maker Yamazaki Mazak, recently cut its work force from 800 to 750 through attrition. Although executives say they still plan to expand, Mazak's facility in Florence, Ky., is now running at only 60% to 70% of capacity.

Or take the Japanese automotive suppliers that have flocked to North America. Japanese carmakers' profit margins are declining in the face of recessions in the U.S., Canada, and a



EXPORTS JAPAN'S EXPORT MACHINE SHOWS NO SIGNS OF WINDING DOWN. ANALYSTS EXPECT HEAVY OVERSEAS SALES GAINS IN CHIPS, COMPUTERS, AUTOS, AND MACHINERY IN THE NEXT FEW YEARS

me. Now the companies are squeezing price cuts out of affiliated offshore suppliers. Although Japanese suppliers closed 89 plants in North America last year alone, East Lansing (Mich.) industrial consultant Marc Santucci thinks that further expansion will come to a halt unless the new plants can drum up more business.

Manufacturers are also facing unexpected pressure from investors who have little reason to return to the stock market as long as profits and dividends remain low. For example, Hirasu Mizuno, general manager of asset allocation and planning at Asahi Mutual Life Insurance Co., wants companies to pay out half their profits in dividends, against only 33% today. Although such an increase could make it tougher for manufacturers to lavish big sums on R&D and new plants, several companies already have begun to respond. Video-game maker Nintendo, for example, recently boosted its dividend 16%, to 45¢.

CALLING OFF. Investor displeasure may already be putting pressure on the *keiretsu* system, which currently ties 70% of Japan's listed shares. Banks and stockbrokers say some capital-starved banks and companies are now quietly selling shares of some of their more distant corporate relatives. In one of the rare publicly disclosed dis-sals of corporate holdings, railroad operator Tokyu Corp. is selling its entire \$545 million stake in All Nippon Airways Co. over the next few years.

The interest represents 4.4% of the airline's total shares.

Any weakening of Japan's *keiretsu* could dampen members' willingness to take risks by depriving them of the financial safety net they now enjoy. Moreover, any shift in stock ownership away from corporate allies could finally open the way for Western-style takeovers. "Erosion of cross-shareholding," says David D. Hale, chief economist at Chicago's Kemper Financial Services Inc., "is likely to produce more convergence between U.S. and Japanese business practices."

Even if the loosening of the *keiretsu* doesn't go very far, a major round of corporate restructurings is on the way. Many analysts believe it's only a mat-

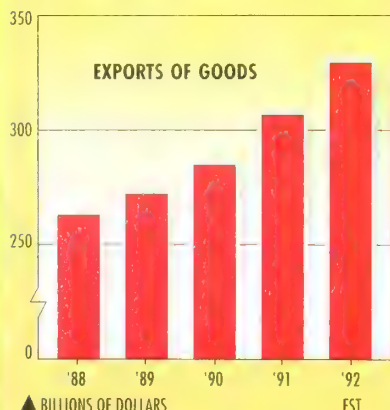
ter of time before Isuzu Motors Ltd. drops out of the auto market. Daihatsu Motor Co., which recently stopped exporting its minicars to the U.S., may be forced into the arms of Toyota Motor Corp.

Weakened consumer electronics firms such as Sansui Electric Co. and phone maker Iwatsu Electric Co. could also face takeovers. Even strong companies are acknowledging that high financing costs are now limiting what they can accomplish. "We really need to automate more," says Citizen Watch President Nakajima. "But we can't finance capital investment with cheap equity anymore."

The Ministry of International Trade & Industry is also forcing restructuring. Offering R&D subsidies and bureaucratic guidance, MITI is pressing manufacturers to move into new businesses with greater strategic and profit potential. Food, brewing, and pharmaceutical companies, for example, are being nudged toward biotechnology. "We're not complacent about our future," says Yutaka Kosai, president of the industry-supported Japan Center for Economic Research.

Despite the new mood of restraint and restructuring, Japanese still aren't questioning the authorities' need to purge the excesses of the bubble years, when the government pumped vast amounts of money into the economy to compensate for a rapidly rising yen. The result was excessive liquidity and rock-bottom interest rates that

JAPAN TRIES TO EXPORT ITS WAY OUT OF RECESSION



drove share prices to 68 times earnings—and real estate prices through the roof.

Just in time, many believed, Yasushi Mieno arrived to bring things back to earth. On taking over as head of the Bank of Japan in November, 1989, Mieno declared war on asset inflation. His weapons: higher interest rates, reduced money growth, and strict orders for banks to curtail real estate lending. Within nine months he elevated the discount rate from 3.75% to 6% and squeezed money-supply growth from more than 13% to less than 2%.

That was all stock and property prices needed to head south. As Mieno's intent became clear, Japan's overheated economy started to come off its torrid 5%-plus growth path that was threatening to fuel a wave of inflation. What nobody counted on, though, was that Mieno, a 45-year veteran central banker, would not know when to stop.

Only under withering political pressure—and after it was too late—did he begin to bring rates down last summer. But even after bringing discount rates all the way back to 3.75%, money remains tight. "First, the government pumped money into the system in an outrageous manner," says Edwin C. Merner, a director at Schroder Investment Management (Japan) Ltd. "Then, when the patient got sick from overindulgence, rather than trying to help, they gave him shock treatment by not giving him anything at all."

Many critics are also angry at Prime Minister Kiichi Miyazawa. Although he is a former Finance Minister and long-standing Keynesian believer in fiscal stimulus, the politically weak Prime Minister so far seems powerless to halt the economic decline and restore

FIVE MYTHS THAT ARE FADING FAST

- ▶ World markets will collapse if the Nikkei falls below 20,000
- ▶ Japan's global acquisition drive is unstoppable
- ▶ Omnipotent bureaucrats run a fail-safe economy
- ▶ Japan Inc. has endless access to cheap money
- ▶ Japanese companies care only about market share

DATA: BW

confidence in the stock market.

Miyazawa's latest budget, unveiled Apr. 1, does little more than front-load \$28 billion in previously scheduled public-works spending into the first half of the new fiscal year. Now, Miyazawa and other Liberal Democratic Party leaders are struggling to draw up a supplementary budget that could inject \$38 billion more in public-works spending later this year. But that may be "too little, too late," says economist Kosai.

PRESSURE. The government's halfhearted approach is also drawing complaints from members of the Group of Seven. The organization is likely to pressure Tokyo for more domestic spending when it meets in Washington on Apr. 25. The G-7 is already troubled that Japan's rapid pullback from international lending and investing may further dampen a global economy already flirting with recession.

But one reason for Miyazawa's dallying is the relative lack of domestic political pressure to do more. "Reces-

sion isn't really an issue for my constituents, because nobody is worried about their job," says Kazuo Aichi, a prominent LDP member of the Diet. Many Japanese are even pleased that tumbling real estate prices may make home ownership possible again.

Some observers expect a streamlined Japan to emerge stronger than ever after working through its current crisis. That may be. For Japan to get its house fully in order, however, will require hard decisions that Japanese leaders have been avoiding for years. Rezoning agricultural land around cities would free up space for housing. That might also help open Japan's closed rice market. And encouraging personal consumption could reduce reliance on exports.

Many are also urging Japan to liberalize rules in its lethargic bond market to help corporations relieve their balance sheets. Deregulating agriculture, retailing, and wholesaling would also free workers for more productive work.

Some of these concerns might evaporate if the stock market and economy defy the skeptics and begin to recover soon. Even so, the country is entering a new era. "We're returning to a period of common-sense management," says Citizen's Nakajima. Indeed, the stock market crash appears to have taught Japan a lesson. No longer can it count on easy money to dominate the world of commerce. Japan will remain a tough competitor. But from here on in, it will compete more like the rest of the pack.

By Robert Neff, with Ted Holden in Tokyo and Zachary Schiller in Cleveland; Paul Magnusson in Washington, Jonathan B. Levine in Paris, and William Glasgow in New York

THE MAN WHO SAID 'THE BUBBLE HAS BURST!'

Tetsuo Tsukimura set himself apart from Tokyo's pack of market economists back in February, 1990, when the Nikkei stock average slid 12% in 20 days. "The bubble has burst," declared the then-obscure economist. But his rivals just scoffed.

Today, Tsukimura, chief economist at Smith Barney, Harris Upham International Inc., is a sage. A growing number of market-watchers consider him the most consistent oracle of Japan's two-year financial free-fall.

Yet Tsukimura, 41, rejects any Doc-

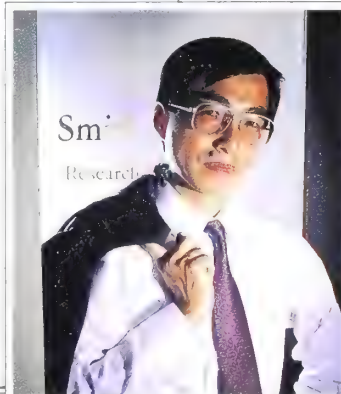
tor Doom sobriquet. "I'm not weird. I'm very normal," he says. He graduated from Tokyo's Waseda University, and during a 14-year stint at Dai-ichi Kangyo Bank Ltd. picked up an MBA from the Wharton School. In 1986, Smith Barney recruited him as its sole Tokyo economist. Smith Barney Vice-Chairman Jeffrey B. Lane admits that Tsukimura's bearishness has cost business: "But he was doing what he was paid to do. His reputation is growing rapidly as, unfortunately, his forecasts turn out to be correct."

Tsukimura chalks up his success to hard work and indepen-

dence of mind. "I'm probably one of the few who look at every statistic that comes out on each day," he says. He sees a "paradigm shift" occurring in Corporate Japan, away from market-share expansionism and into a "melt-down" in cross-shareholdings.

Tsukimura sees more gloom ahead: an 0.8% drop in gross national product this year. Clients say he thinks the Nikkei could fall to 6,000. "I know the market will go down further, but I don't want to say how far because it would have a big impact," he says. Anyone scoffing now?

By Robert Neff in Tokyo



SMITH BARNEY'S TSUKIMURA

TOSHIBA: RETHINKING THE WAY IT DOES BUSINESS

Like other blue chips, it pares costs and cuts deals with rivals

As the recession hovers over Japan, few have taken a worse beating than Toshiba Corp., one of the world's biggest makers of computer chips, home appliances, and heavy machinery. Profits fell 58% last year, to \$827 million, and may not recover much in 1992. Its stock is in the doghouse, its CEO machines are gathering dust, and so are many of its famous laptop computers. Admits Shigeru Usui, general manager of corporate planning: "The recession's having a significant impact."

Just as it is across corporate Japan, the current economic cycle is forcing Toshiba executives into a flurry of change. They're girding for the rest of the decade and rethinking investment and export strategies, product cycles, and ventures with outsiders. But given Toshiba's top-notch engineers and world-class factories around the globe, it's likely to emerge stronger once the recession is over.

For now, though, Toshiba is retrenching. The giant is trimming capital spending, expected to drop 10% this year, to \$1.4 billion. It's a move that could injure the company's position in markets two years down the road. Travel and overtime budgets have already been slashed. U.S. companies such as AST Research Inc. and Dell Computer Corp. have cut into Toshiba's share of America's laptop market, and South Korea's Samsung Electronics Corp. is the top seller of 4-megabit DRAMs in the U.S., an important segment for Toshiba.

AGGING DEMAND. More troubling, Toshiba could be forced to reconsider its neck-and-neck race for product development—something that rivals Sony Corp. and Matsushita Electric Industrial Co. have already begun. At Toshiba's Ome

Works, a giant laptop facility two hours west of Tokyo, flexible assembly lines crank out a dozen new models every year. But with flagging demand for such products, it will be harder for Toshiba to justify the development costs.

As a result, Toshiba finds itself cutting more and more deals with rivals around the world. To avoid both trade friction and currency swings, Toshiba already builds PCs, medical equipment, motors, chips, and TV tubes in the U.S. And it has enlisted a slew of powerful

engineer who now heads the venture.

Such compromises may be a sign of vulnerability. But Toshiba is still an engineering powerhouse. For one thing, not all of the company's wide-ranging product sectors have been hit equally hard. At the same time that it tightens belts in chips and consumer electronics, for example, Toshiba is beefing up production in heavy electrical equipment and energy systems, which brought in \$7 billion in revenues last year. Sure, a decade of frenzied investment has socked Toshiba with hefty bills. But it also produced a network of offshore factories and new products for when the world starts spending again.

CUSHIONING. Even in the glutted semiconductor business, Toshiba is hanging tough. Chipmaking may never again yield the same high margins Toshiba and others saw in the late 1980s. Still, analysts predict a gradual recovery by yearend, pulled by growing demand in the U.S. for PCs. Toshiba has outspent most of its rivals over the past two years to boost production for memory chips that store 4 million bits of data. Now, the company will reap the biggest rewards even in a modest upturn.

So Toshiba has cushioned itself against more painful measures. Nobody familiar with the company anticipates serious disruption of its *keiretsu* structure, for example, although some small suppliers at the fringes may go under or consolidate. Nor is the company likely to scale back product in-

novation significantly, although it may stretch out some consumer-product cycles.

And even with the announced cutbacks in capital spending, research and development budgets—allocated as a fixed percentage of revenues—won't shrink unless there's a drastic drop in sales, which few analysts foresee. For the immediate future, Toshiba will go on plowing money into high-definition TV, liquid-crystal displays, next-generation batteries, and high-risk fields such as warm-temperature superconductors, according to corporate planner Usui. "We'll continue to take a long-term perspective." There's no danger of Toshiba losing its way, but there's a difficult patch to get through first.

By Neil Gross in Tokyo



FINE-TUNING TOSHIBA ISN'T SKIMPING ON DEVELOPING NEW PRODUCTS SUCH AS HDTV

partners. For years, it has been swapping valuable semiconductor knowhow with Motorola Inc. at a jointly owned plant in northern Japan. A year ago, it started building flat-panel displays in a joint venture with IBM. Other partners include General Electric Co., Siemens, and Time Warner Inc.

These strategic alliances come with a steep competitive price tag. By working with IBM to make color liquid-crystal displays, Toshiba cuts some of its development costs and can lock in Big Blue—the world's biggest PC maker—as a customer. But the deal also involves a massive transfer of Toshiba's flat-panel expertise into the partnership, and indirectly, to IBM. "There's been a continuous flow of technology," says Koichi Ogura, a former Toshiba production en-

THE SQUEEZE FELT 'ROUND THE WORLD

When Tokyo tightened credit, its banks were left gasping for breath



UNREAL ESTATE IN THE U.S., WHERE THEY'VE FINANCED HIGH-PROFILE DEALS LIKE PEBBLE BEACH, JAPANESE BANKS ACCOUNT FOR 16% OF ALL COMMERCIAL AND INDUSTRIAL LOANS



A light drizzle washed the blossoms from the cherry trees outside the Tokyo Stock Exchange. But inside, a storm was raging. The market plunged 764

points on Apr. 1, even after Japan's bureaucrats announced lower interest rates and an economic stimulus package. Fund managers flooded the exchange with sell orders and bank stocks plummeted to new lows. Many stocks didn't even trade, for lack of buyers. Unable to explain the sell-off, one mystified Finance Ministry official implored investors to "be confident and cheer up."

What has happened to the invincible Japanese financial system, the driving force behind the country's economic miracle? For decades, the banks and stock market provided the fuel that made the Tokyo engine hum so smoothly. Japan's banks are at the center of its vaunted *keiretsu* system, pumping in cash to finance the robust growth that has made Japan a global powerhouse. From nowhere, they emerged as world titans—7 of the world's 10 biggest banks now are Japanese. They have extended their reach around the world, financing everything from golf courses at Pebble Beach and office towers in Manhattan to auto plants in Thailand.

But now, Japanese banks are in retreat. While the market crash may not add up to a fiasco on the scale of the U. S. savings and loan crisis, it has created tremendous doubt about the stability of Japan's financial system. The crash is wiping out banks' capital just as bad loans are piling up. If the Nikkei stays down, "banks will be forced to reduce loans," says Yukihiro Fujiwara, senior managing director at Sanwa Bank Ltd. "It will be extremely difficult to expand."

According to a confidential Bank of Japan report leaked in early April to the local press, Japan's banks are holding \$215 billion in bad debts, or 5% of all loans. More than two-thirds of the bad debt is carried by Japan's top 21 banks. The biggest deadbeats are Japan's property developers. Some 70% of them are no longer paying interest on their loans.

OVERHAUL TIME. The red ink is everywhere. Analysts say that 8% of borrowers from Japan's third-largest long-term lender, Nippon Credit Bank Ltd., are not paying interest on loans. Hanwa Bank Ltd. has 30% of its loans tied up in Osaka real estate, where prices have fallen 40% in the last year alone. Osaka Bank is also struggling to rescue two nonbank affiliates that are drowning in bad debt. And with a \$6 billion government deposit-insurance fund, it would take only one

bank failure to wipe out those reserves. "Bad loans are still going to increase considerably for everyone, including us," says Kenji Mizutani, chief economist at Tokai Bank Ltd. The mood is getting so bleak at small regional banks that it has set off a wave of mergers.

As the squeeze intensifies, Japanese bureaucrats are finally realizing that they will have to take drastic action. Some bankers favor additional interest rate cuts by the Bank of Japan. That would help borrowers recover, curb bankruptcies, and improve bank loan portfolios. But for now, Bank of Japan governor Yasushi Mieno insists there won't be another reduction.

Besides, another rate cut won't address the basic problems plaguing Japan's archaic financial system. Even the regulators, who have resisted major changes, are coming to the conclusion that it's time for an overhaul. As long as the market was soaring, they could keep interest rates down and capital costs low, at the expense of depositors, who lost out on an estimated \$237 billion to \$378 billion over the last decade, according to a U. S. government study. But as the market drops, pressures are building to speed up deregulation and, ultimately, bring Japan's system more in sync with the rest of the world.

Without government help, the banks

be forced to tighten credit further and sell off assets. Sitting on billions in reserves, such giants as Hitachi, Toshiba, and Toyota can afford to ride out a potential lending crisis. But an executive at Tokyo-based Nisshin Fudosan, a real estate company, says banks have been lending to them by around 50%. "In the past, one bank would supply all the funds for several projects," he says. "Now, we must go to several different banks for each project." Many are cut altogether. Bankruptcies jumped 10%, to \$55.6 billion, in the year ended Mar. 31. Japan's financial crisis is being felt around the world. Some 40% of Japanese bank assets are overseas. The banks account for a staggering \$2 trillion in international bank loans, 40% of all global lending. In the U.S. alone, they account for 16% of all commercial and industrial loans—and 35% of all loans in California. Some analysts worry that the banks will have to repatriate money to cover losses and beef up capital levels. "The easiest way to cut the portfolio is by cutting overseas lending," says Sanwa's Fujiwara. **MONSTER.** The reach of Japan's banks goes beyond lending. They became major guarantors of U.S. municipal bond issues, enabling large and even small towns to obtain A ratings and cheap funds. But now that many banks are being downgraded, the value of many Japanese-backed municipal obligations held by U.S. mutual funds and other investors could be in jeopardy.

The banks' problems started when Japan's bureaucrats decided to squeeze out excesses in the real estate and stock markets in the late 1980s, when prices reached astronomical levels. To wring out speculators, the Bank of Japan tightened credit. Yes, the cash-flyers went under. Yes, land prices dropped 13%, to the delight of new-home buyers. But the squeeze took on a life of its own, and even Japan's best and brightest couldn't stop the Nikkei's free-fall.

No bank is immune from the turmoil.

Take Sumitomo, the world's third-largest bank. On Apr. 9, indicted stock speculator Mitsuhiro Kotani declared personal bankruptcy—the second-largest ever in Japan—saddling Sumitomo and others with debts of \$907 million. Of all the Japanese banks, Sumitomo has the most exposure to the Reichmanns' ailing Olympia & York Developments Ltd. (page 89), with loans adding up to \$300 million.

Some banks are already falling short of minimum-capital standards (table).

Trouble like that may force the Japanese to press the Group of Seven industrial nations to keep the BIS standard at its current interim level of 7.25%, which they now meet. "If the gun is pointed at Japan's head and it looks like the bullet is going to ricochet and hit your markets if you pull the trigger, then you will think twice," says J. Brian Waterhouse, an analyst at James Capel Pacific Ltd. in Tokyo.

'NO TRUST.' In the past, the Finance Ministry always stepped in to save the day.

It would ask securities firms to come up with ideas to support the market during weak periods. But after last summer's securities scandal, the Ministry is at pains to avoid giving the impression it's trying to help the brokers or manipulate the stock market. In fact, the two groups are barely on speaking terms. "There is absolutely no trust between us anymore," grumbles a top executive at one of the biggest brokers.

Bad chemistry aside, worried Finance officials are considering dramatic moves. For a start, they may force banks to open their books to disclose the extent of their bad loans. Momentum is also growing to create a secondary market, in which banks convert their loans to securities and then sell them to insurance companies and pension funds. That would allow the banks to trim their assets.

Until now, the regulators have held back on such radical reforms, partly for fear that it would open the door to more experienced outsiders. When Japan

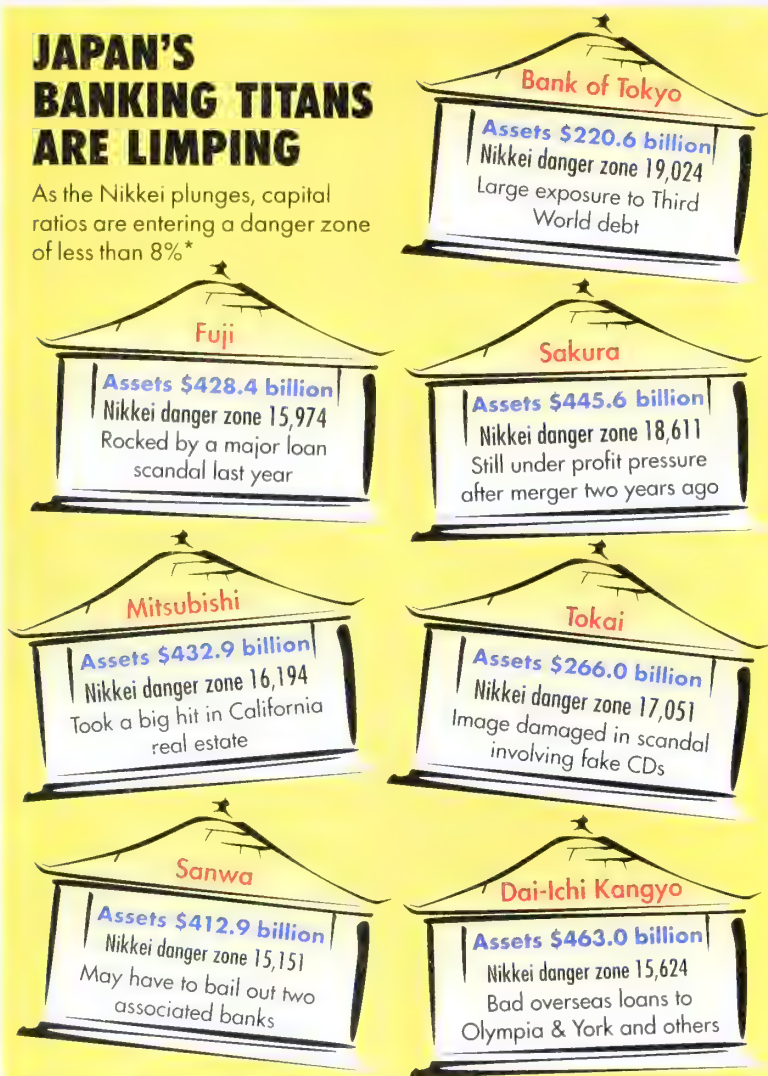
started trading in stock index futures in 1988, U.S. firms such as Salomon Brothers Asia Ltd. and Morgan Stanley Japan Ltd. quickly dominated the business.

The most reassuring note of all is that the Japanese have not allowed a bank to fail since World War II. They place the utmost "priority on the stability of the system," says Daquil. In these troubled days in Japan, the stability couldn't come fast enough.

By Ted Holden in Tokyo, with Joyce Barnathan in New York

JAPAN'S BANKING TITANS ARE LIMPING

As the Nikkei plunges, capital ratios are entering a danger zone of less than 8%*



*MINIMUM 1993 RATIO OF CAPITAL TO TOTAL ASSETS AS SET BY THE BANK FOR INTERNATIONAL SETTLEMENTS. INCLUDES 45% OF UNREALIZED GAINS ON CORPORATE SHAREHOLDINGS

DATA: IBCA LTD., COMPANY REPORTS

Under global rules taking effect next year, the Bank for International Settlements will allow Japanese lenders to count 45% of their unrealized gains on stocks as capital. Since September, the market crash has slashed such reserves at 11 major banks by half, to \$85 billion. And if the Nikkei sinks to 11,570, all of it will be gone, says Linda Daquil, senior analyst at UBS Phillips & Drew International Ltd. That would force banks to freeze lending and call in domestic and overseas loans.

'HOW CAN YOU CALL THIS A RECESSION?'

With jobs and savings secure, few Japanese are feeling the pinch



The tiny bar beside a Route 246 exit ramp in Tokyo resembles a Japanese version of the TV series *Cheers*. Neighborhood regulars dropping in for grilled seafood or a cup of sake are greeted from behind the counter by Miyoji Odagiri or his son Yukio, who serves up bamboo-shoot appetizers. On a recent evening, the talk shifts from baseball to skiing to Jodie Foster, turning to the economy only briefly. "Recession?" blurts one patron, an office manager in his late 30s. "The bubble has burst, that's for sure, but how can you call this a recession?"

Well, you can't. Economic growth is flat, corporate profits are plunging, and the stock market is a disaster. But Japanese consumers, whose spending accounts for 60% of the economy, have hardly noticed. Unlike what's happening in the U.S., there are no layoffs, let alone headlines. Sure, consumption is somewhat less conspicuous. But like Yoko Totani, a college teacher from Omiya, just north of Tokyo, many wonder what all the fuss is about. "It doesn't touch my life at all," she says.

One reason is that few people are directly exposed to the crashing stock market. A Bank of Japan survey shows that only 11% of household savings last year was tied up in stocks, with more than three-quarters parked in time deposits in banks.

TENNIS, ANYONE? More important, the mayhem in the Kabuto-cho—the stock market district—hasn't spread to the masses because of the social contract between Corporate Japan and its full-time employees. As a reward for holding down wage demands in good times, workers know their jobs are safe even in tough times. Unemployment is a mere 2%. Wage-rate growth slowed to 4.8% this year. But with inflation a low 2%, employees still end up with fatter paychecks. "They paid a security fee, and

now they're collecting," says Chiharu Shima, an economist with UBS Phillips & Drew International.

Look around. It's easier nowadays to get a cab home from the Roppongi entertainment district on Saturday nights, but that's partly because the scene has shifted to waterfront discos. There, Juliana's packs in up to 3,000 gyrating dancers, 50% beyond capacity. Expense-account bars and French restaurants in the Ginza have clearly suffered, as bean counters snip corporate credit cards. But in spots where people spend their own money, such as Italian restaurant La

That's not to say everything is humming as smoothly as an Infiniti engine. There will be dislocations as temporary workers in the auto and other industries are let go. Foreign laborers, another cushion, are being turned away. And small suppliers are getting squeezed as clients lean on them to cut costs.

VALUE SHOPPING. With all the gloom in business news, consumers are getting nervous about tossing money around. "It's a confidence problem more than an economic one," says UBS's Shima. A key weakness is auto sales, which dropped 3.8% in 1991 after 10 years of growth.

Even on a weekday afternoon, the shops in the Shinjuku district are jammed with patrons, defying reports that Tokyo department-store sales are down a stunning 8% so far this year. Instead of snapping up whatever is in the fashion magazines, regardless of price, "customers are getting more clever about shopping," says Hajime Sayo, who is a general manager at Isetan department store. "They still demand qual-



PARTY TIME VOGUEING IN A TOKYO DISCO: DANCERS FILL THE POPULAR NIGHT SPOTS ALONG THE WATERFRONT TO CAPACITY—AND BEYOND

Corsica in Ebisu, it's business as usual.

Such extravaganzas as Japan's notorious million-dollar golf memberships are nearly history. But at the Greenwood Tennis School on the southern edge of Tokyo, where residents take eight weeks of lessons for \$190, enrollment is at 200 and rising. Says instructor Hiroshi Tabuchi: "We cater to average people, so times are good for us." One of them, an office worker in her 20s, agrees. She took ski trips until the snow melted and is now hunting for beach venues. The Japan Travel Bureau predicts a record 12 million Japanese will go overseas this year, some 410,000 in next month's Golden Week holiday period alone.

ity, but they're conscious of price, too.

Another reason for sluggish sales: After a half-decade-long spending spree, some people are realizing that "they bought enough for a while," points out Hiroshi Sekizawa, executive director of the Hakuhodo Institute of Life & Living, a think tank. "How many big-screen TVs does a person need?"

Many people agree with that office manager in Odagiri's bar. "We Japanese work hard, so we'll always be able to eat and keep a roof over our heads," he says. Indeed, a Japan-style recession is nothing like what Americans have struggled through. At least not yet.

By Karen Lowry Miller in Tokyo

“To me, all these advances in personal computing are meaningless unless they make my job easier. Period.”

Whether you're responsible for 5,000 desktop computers or just the one in front of you, all the PC power in the world doesn't really matter if you can't figure out how to make it work for you.

♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦

At Microsoft, we've always felt the personal computer should be just that – personal. There's little use in technology racing ahead if it leaves people behind.

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Graphical computing in Windows has proven to be an easier, more intuitive way for people to get all of their work done – more so than typing the /c command.



With Windows, you can point and click to do your work.

You no longer have to memorize a cumbersome chain of commands or a dictionary-sized manual to get work done.

Now you can simply point and click to change fonts, add columns of numbers, reformat documents and more.

Today, there are thousands of applications for Windows that



We listen to you – on the phone, in letters, at trade shows – so we know how to make the computing tasks you do most often easier.

you can do this with, including Microsoft Word for Windows and Microsoft Excel for Windows.

And because all Windows-based applications have a common interface, once you've learned one, you're well on your way to knowing the next. And the next.

The result? People can do more, faster. For businesses, that means a better return on hardware and software investments, in the form of greater productivity and a lower learning curve.

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Soon, you'll be able to sit down at any computer, anywhere, and get the information you need. And make the changes you need. And get the results right away. No matter what application you're in.

Because our aim is to make computers every bit as simple and reflexive to operate as your TV or car or phone.

And that's why, when we say “Making it easier,” we're not just talking about making your work easier.

We're talking about making your job easier. And your life.

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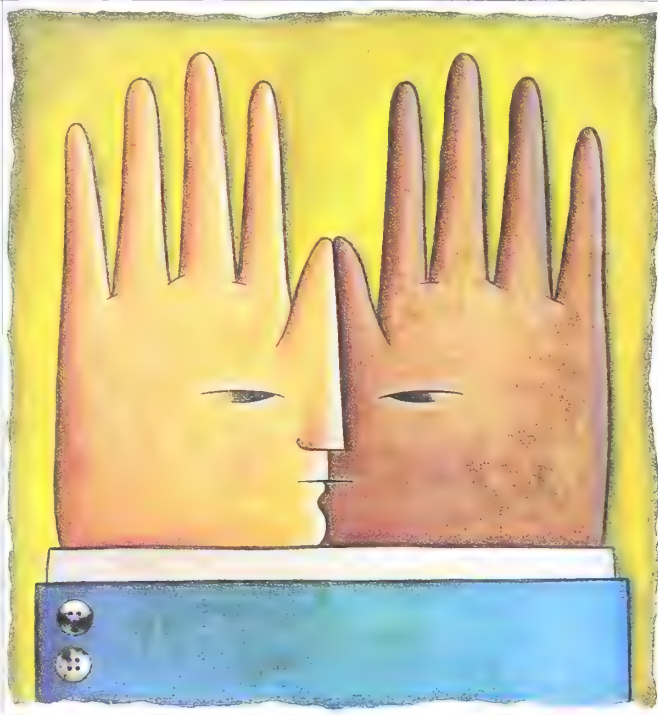
DOING THE RIGHT THING IN SOUTH AFRICA?

Some U.S. companies are rushing back—with social aid

As a young black growing up in the white-dominated world of Johannesburg, Ella Kungoane had little hope of realizing her dream of a computer career. There were precious few South African high-tech companies and even fewer breaks for blacks. But things are looking up for Kungoane. Microsoft Corp., which announced its plans to return to South Africa in January, has brought the 30-year-old college graduate to its Redmond (Wash.) headquarters to train her for a job in South Africa's emerging software industry. Says Kungoane: "Blacks were never allowed to get this far back home."

Microsoft isn't alone. For some 60 U.S. companies, a prime topic at this spring's annual meetings will be reinvesting in South Africa. In many ways, the climate seems favorable: African National Congress President Nelson Mandela, once fond of Marxist bromides about nationalizing assets and redistributing wealth, now holds forth on the need for foreign capital and technology transfers during elegant dinner parties with captains of industry in the U.S. But with a new multi-racial government forming, the political situation is very complicated. Some companies are trying to cover all the bases by devising internship programs, community reinvestment efforts, and affirmative-action plans along with their reinvestments (table).

Along with Microsoft, companies such as Lotus Development, First Boston, Citibank, and Federal Express have good reason to be cautious. Although the



Bush Administration lifted South African trade sanctions last July, roughly 140 state and local governments in the U.S. still impose restrictions, refusing to award public contracts to businesses with South African holdings. The companies manage to sidestep state and municipal restrictions on U.S. investment in

South Africa by investing indirectly with a local partner. Despite the crumbling apartheid system, companies that rush back too soon are likely to receive a frosty reaction from institutional shareholders, too. "Given the uncertain political climate, it's unclear whether this is an idea whose time has come," says John Schultz, president of Ethical Investments Inc., a Minneapolis-based research firm that tracks socially responsible investing.

STRICT GUIDELINES. Reinvesting is a political thicket on the South African side as well. While Mandela plans to allow U.S.-owned subsidiaries once an interim government is in place, he and other black leaders aren't advocating unbridled free enterprise. On Mar. 28, the Congress of South African Trade Unions unveiled a draft investment code that calls for strict guidelines on work conditions, affirmative action, training, and social programs. They're nonbinding so far, but "companies that aren't willing to change are likely to have a hard time," warns an ANC spokesman in Washington. Adds Richard Knight, a researcher at the Africa Fund, a New York-based group that monitors U.S. investments in South Africa: "It's not going to be enough for companies to espouse promises of trickle-down benefits for blacks."

The corporations understand that a little social activism can go a long way. H.J. Heinz Co. hopes to have a food-distribution agreement with a local partner by yearend and is likely to set aside money for a community reinvestment program before the deal is done.

A consortium of U.S. banks and investment houses, including First Boston, J.P. Morgan, Citibank, and Chase Manhattan, has pooled roughly \$500,000 to give nonwhite South African executives six-month U.S. internships in global finance and development. ANC officials have made such training for financial executives a top priority, according to Ronald T. Gault, managing director of First Boston.

Companies that seem insensitive to relation-

RETURNING TO SOUTH AFRICA

RECENT INVESTMENTS BY U.S. CORPORATIONS

FIRST BOSTON is leading a consortium of banks and investment houses to conduct a \$500,000 training program. South African financial executives will spend six months in the U.S. studying global finance and other issues of interest

FEDERAL EXPRESS recently signed with South Africa's XPS Services to ship its packages into the market. Also negotiated a contractual agreement that XPS have a 50/50 ratio of minority and white managers by 1993

MICROSOFT has contracted with South Africa's WorkGroup Systems to distribute its software. Also participating in an internship program, in which the company trains South Africans at its headquarters in Redmond, Wash.

LOTUS has inked deals with HNR Computers, a black-owned enterprise, and Computer Horizons, to distribute its spreadsheets and other products. Starting this year, will invest \$350,000 annually for technical training in depressed areas

DATA: BW INVESTOR RESPONSIBILITY RESEARCH CENTER



**This year, the average
corporate manager
will spend 588 hours
sitting in meetings.**

**Fortunately, this is
no average chair.**



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AC&R ADVERTISING

Overall Billings Growth: Down 9% to \$172.7 million..... **C**

Clients Lost: Resigned Marshalls account. Lost creative and copy talent. **C**

New Clients: *Teen & Country* magazines, Filene's. **D**

Growth From Current Clients: Increased about \$1 million or 0.9%. **B-**

Creativity: Lauder is elegant, Foot Locker and Foot Locker are attentive, not overall work lacks. **B-**

Management Savvy: Two big back at tempt. Tied out, West Coast office and some executive satisfaction of turn over. Leadership missing. **D**

Teacher's Comments: Lauder, Foot Locker and Foot Locker are not the agency. But with low bids flying and top level churn continuing, some relief is needed.

Overall Grade:

C

ALLY & GARGANO

Overall Billings Growth: Down 8.5% to \$300 million..... **C**

Clients Lost: Tambrands. **C+**

New Clients: Weight Watchers Frozen Foods, Celestial Seasonings, SNET Yellow Pages. **B**

Growth From Current Clients: Down \$8 million or 2.4%. **C-**

Creativity: Agency between creative directors for much of year and no hum reel is result. Dunkin' Donuts continuingly amusing. **C+**

Management Savvy: Agency seemed to be unfocused for much of '91. **C+**

Teacher's Comments: With hire of Mal MacDougall, agency has finally set out on a new course.

Overall Grade:

C+

AMMIRATI & PURIS

Overall Billings Growth: Up 6.4% to \$250 million..... **B**

Clients Lost: Club Med. **B**

New Clients: Compaq computers, division of Sterling Drug. **A**

Growth From Current Clients: Up 1.6%, or \$4.8 million..... **B**

Creativity: BMW creative seemed stuck in rut last year, but ads for Aetna and Philip's Milk of Magnesia stand out from clutter. **B+**

Management Savvy: No less than seven creatives left the shop this year, not a good sign for an agency that seems to have enough blue-chip clients to keep creatives happy. What's wrong?..... **B-**

Teacher's Comments: Despite the creative turnover, the agency worked its new business magic.

Overall Grade:

B

AVRETT, FREE & GINSBERG

Overall Billings Growth: a banner year, up 53.1% to \$245 million..... **A**

Clients Lost: None..... **A+**

New Clients: Schieffelin & Somerset's Johnnie Walker Red, A.H. Robbins' Di-metapp, American Savings Bank and Lorillard's Harley-Davidson and Triumph Cigarettes. **A**

Growth From Current Clients: Up 9.4%, or \$15 million..... **A**

Creativity: Cat Chow and Hotpoint ads display creative spark, but Ralston Purina cereal ads are lacking. **C+**

Management Savvy: Vaulted past \$200-million billings mark while showing that agency can make a profit from TWA's reduced commission rate. **B**

Teacher's Comments: Although not known for breakthrough creative, campaigns do get results. Nabbing Johnnie Walker was a coup.

Overall Grade:

B+

GRIFFIN BACAL

Overall Billings Growth: Up 4.5% to \$173.8 million..... **B-**

Clients Lost: None..... **A+**

New Clients: Tonka Corp., New York Nets, Sports Graphics. **B**

Growth From Current Clients: Down 0.9% or \$1.5 million..... **C+**

Creativity: GBI work is certainly on strategy, and art direction on Sharp can be interesting. Otherwise, nothing to write home about. **C+**

Management Savvy: GBI continues to expand its client base beyond Hasbro. **B**

Teacher's Comments: The key to GBI's future growth may be finding a truly creative.

Overall Grade:

B

LAURENCE, CHARLES, FREE & LAWSON

Overall Billings Growth: Up 0.3% to \$267 million..... **B-**

Clients Lost: American Home's Jiffy Pop, McDonald's co-op work. **B**

New Clients: Windex, Thompson Medical and Ross Labs. **C**

Growth From Current Clients: Down 0.9%, or \$2.3 million..... **C+**

Creativity: Some good work for Clairol and Keri. The balance is basic packaged-goods advertising. **C**

Management Savvy: Management still abides by time-worn LCFL tradition: if it ain't broke, don't fix it. **B**

Teacher's Comments: An agency that's not pretending to be something that it isn't.

Overall Grade:

B-

LOWE & PARTNERS

Overall Billings Growth: Billings flat at \$325 million..... **B-**

Clients Lost: Johnson & Johnson's Imodium A-D, Lactaid, Mylicon. **B**

New Clients: None..... **F**

Growth From Current Clients: Down 3.1% or \$10 million..... **C**

Creativity: TV work continues to range from good to excellent. Grey Poupon is standout, and Oral B is droll. **A**

Management Savvy: The agency spent a year serving existing accounts and looking for the right person to take the title of president. **B+**

Teacher's Comments: The agency's goal is to be in the top five U.S. agencies creatively, and the top 10 in terms of size. So far, the shop's closer creatively.

Overall Grade:

B-

MCCAFFREY AND MCCAUL

Overall Billings Growth: Down 0.3% to \$274.5 million..... **B-**

Clients Lost: Down only \$5 million for calendar year. **B**

New Clients: None..... **F**

Growth From Current Clients: Up slightly at 1.8%. **B**

Creativity: Mercedes work was excellent. Sudafed is effective. Bacardi print was strong. **B**

Management Savvy: Succeeded in sealing its buy-back deal but then Mercedes and Bacardi went into review. **C**

Teachers Comments: Two clients that the agency got its identity from are gone. Management must restore positive vision.

Overall Grade:

C+

MESSNER VETERE BERGER CAREY SCHMETTERER

Overall Billings Growth: Up 168% to \$208 million..... **A+**

Clients Lost: Pergament, Commodore. **B**

New Clients: Volvo Cars of North America, MCI International. **A+**

Growth From Current Clients: Up 33%, or \$2.7 million..... **A+**

Creativity: Agency has been MCI's ad agency since 1988. Also protected the Volvo brand by not doing competitive business with Volvo. **A**

Management Savvy: With all those partners, the agency has been able to define a niche. But it's not yet a national agency. **A**

Teacher's Comments: Messner has arrived as an agency.

Overall Grade:

A

PARTNERS & SHEVACK

Overall Billings Growth: Up 6% to \$171.9 million..... **B-**

Clients Lost: Newmark & Lewis. **C**

New Clients: Del Laboratories, International Women Apparel Manufacturers and N&M. **B**

Growth From Current Clients: None. **B-**

Creativity: Steady, well-produced packaged-goods work, with occasional flashes of style, like the work for Major League Baseball. **B-**

Management Savvy: Top executives are making partnership with Mickelberry work. Sure and steady. **B+**

Teacher's Comments: Competing well with better-known agencies.

Overall Grade:

B-

SCALI, MCCABE, SLOVES

Overall Billings Growth: Down 30% to \$160 million..... **F**

Clients Lost: None..... **A+**

New Clients: Arams, Fedders. **D**

Growth From Current Clients: Up 2.8%, or \$0.4 million..... **B**

Creativity: Maybe Frank's just getting old, but Perdue ads not what they used to be. Anso Carpet cleverly capitalized on Persian Gulf war fever. All things considered, not bad work, but not like the good old days. **B**

Management Savvy: Marvin Sloves was smart enough to bring in Pat Fallon to stem the bleeding. **A**

Teacher's Comments: They survived. That says it all.

Overall Grade:

B-

TWA

Overall Billings Growth: Up 9% to \$233 million..... **B**

Clients Lost: Gerber assignment. **B**

New Clients: Club Med, New York Mets, Carvel. **B**

Growth From Current Clients: Up 4.1%, or \$8.8 million..... **B**

Creativity: Absolut goes on and on and still looks great, and Carvel ads have charm. Club Med ads are OK, but this client needs really aggressive repositioning. **B+**

Management Savvy: Partners have been in place for seven years or more, keeping the shop's personality in place while it continues to grow. **A**

Teacher's Comments: Effectively making the shift from a print to a TV agency.

Overall Grade:

B+

THE 30 HOTTEST U.S. AGENCIES OF 1991 /ADWEEK MARCH 23, 1992

Rank	Agency	ADWEEK Performance Index	1991 Billings Thousand \$	Rank Among Top 100 Agencies	Increase in Billings 1991 vs. 1990	
					Thousand \$	Percent
1	Messner Vetere Berger Carey Schmetterer, New York	1810	207,835	40	130,278	168.0
2	Goodby, Berlin & Silverstein, San Francisco	907	117,300	75	54,000	85.3
3	Lewis & Gace, Fort Lee, NJ	740	83,064	99	34,361	70.6
4	Wieden & Kennedy, Portland, OR	730	168,000	4	67,000	66.3
5	Avrett, Free & Ginsberg, New York	616	245,000	35	85,000	53.1
6	Team One Advertising, El Segundo, CA	379	183,500	44	45,827	33.3
7	Gross Townshend Frank Hoffman, New York	367	104,586	79	26,538	34.0
8	The Richards Group, Dallas	326	180,000	46	40,000	28.6
9	Bernstein-Rein Advertising, Kansas City	306	135,395	68	29,377	27.7
10	Klemtner, New York	259	165,000	54	30,600	22.8
11	Ferguson Communications Group, Parsippany, NJ	229	173,090	49	28,796	20.0
12	Angotti, Thomas, Hedge, New York	215	90,000	89	15,000	20.0
13	Tatham/RSCG, Chicago	213	324,679	27	46,459	16.7
14	Rotando Lerch & Iafeliece, Stamford, CT	211	85,500	96	14,100	19.7
15	Kresser/Craig, Los Angeles	208	92,166	87	14,933	19.3
16	William Douglas McAdams, New York	207	155,500	58	24,050	18.3
17	Hill, Holliday, Connors, Cosmopolos, Boston	190	357,293	23	45,293	14.5
18	Arnold Fortuna Lane, Boston	185	85,590	95	12,590	17.2
19	Admarketing, Los Angeles	184	317,200	28	40,000	14.4
20	Medicus Intercon, New York	177	227,748	38	29,416	14.8
21	Wells, Rich, Greene BDDP, New York	170	923,700	15	77,900	9.2
22	Margeotes Fertitta & Weiss, New York	157	103,000	82	13,000	14.4
23	Tucker Wayne/Luckie & Co., Atlanta	147	167,000	53	19,000	12.8
24	Fallon McElligot, Minneapolis	146	110,000	76	12,907	13.3
25	Mullen, Wenham, MA	139	96,210	85	10,910	12.8
26	Grey Advertising, New York	131	1,553,000	8	78,000	5.3
27	Geer, DuBois, New York	126	150,000	61	15,000	11.1
28	Venet Advertising, New York	126	124,900	73	12,700	11.3
29	Rubin Postaer & Associates, Los Angeles	125	180,700	45	17,500	10.7
30	Rumrill-Hoyt, Rochester	125	99,350	84	10,267	11.5
Average—10 Hottest		618	142,468		51,238	56.7
Average—Top 30		328	233,544		36,026	29.2

THE EAST'S HOTTEST AGENCIES OF 1991 /ADWEEK MARCH 23, 1992

Rank	Agency	ADWEEK Performance Index	1991 Billings Thousand \$	Rank Among Top 50 Agencies	Increase in Billings 1991 vs. 1990	
					Thousand \$	Percent
1	Messner Vetere Berger Carey Schmetterer, New York	1810	207,835	25	130,278	168.0
2	Avrett, Free & Ginsberg, New York	616	245,000	23	85,000	53.1
3	Grace & Rothschild, New York	274	76,750	49	15,750	25.8
4	Angotti, Thomas, Hedge, New York	215	90,000	45	15,000	20.0
5	Wells, Rich, Greene BDDP, New York	192	846,600	6	83,000	10.9
6	Margeotes Fertitta & Weiss, New York	157	103,000	42	13,000	14.4
7	Grey Advertising, New York	143	1,314,000*	3	79,000	6.4
8	McCann-Erickson, New York	132	724,000	7	53,000	7.9
9	Geer, DuBois, New York	126	150,000	33	15,000	11.1
10	Venet Advertising, New York	126	124,900	36	12,700	11.3
11	Rumrill-Hoyt, Rochester	126	99,350	44	10,267	11.5
12	TBWA, New York	110	233,518	24	19,388	9.1
13	Calet Hirsch & Spector, New York	110	110,000	39	10,000	10.0
14	BBDO, New York	106	711,613	8	42,615	6.4
15	J. Walter Thompson, New York	84	590,000*	11	30,000	5.4

*estimated

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ships are asking for trouble. Last September, Philadelphia-based Crown Cork & Seal got into a nasty row with its trade unions when it fired many workers for taking time off without giving notice to protest recent political killings. The dispute escalated into a walkout, and C&S soon became blacklisted by the anti-apartheid movement. After months of acrimony, all sides made peace on Apr. 1, though the damage to the company's image with South African unions has been serious. Says Crown Chairman William J. Avery: "In South Africa, there's a learning process."

LOCAL ACTION. That's a lesson other companies would prefer to skip. Consider Lotus Development Corp. Last year, HNR Computers, a black-owned Johannesburg company, approached Lotus for the right to sell its 1-2-3 spreadsheet program. Lotus was leery—until it realized the deal had the blessing of the ANC, whose top officials brought their pitch personally to the company's Cambridge (Mass.) headquarters. In January, Lotus signed a distribution deal with HNR and another distributor, Computer Horizons. But the South Africans weren't just

Lotus is setting up a fund to train blacks and women, and Microsoft is hiring black computer-science graduates

asking for software. "Our call is for companies to invest affirmatively—to recognize the potential among blacks," says HNR Managing Director Rasheed Hargey. Lotus listened. It plans to invest \$350,000 a year in an education trust fund to train blacks and women. Microsoft also believes in working with the locals: It has set up a distribution deal with WorkGroup Systems, a South African wholesaler, to move \$10 million to \$20 million worth of software annually and is offering to train and place black computer-science majors in jobs.

Some critics say such programs will do little to effect lasting change in South Africa. But it doesn't feel that way to the South Africans involved. Just ask future software executive Kungoane. After years of frustration, she's busily making plans to teach and work in Johannesburg after her internship at Microsoft. "I feel there are many ways to fight the war against apartheid," says Kungoane. "My way is through education." It's a promising path for Corporate America, too.

By Bruce V. ... in Washington, with ... in Johannesburg and Joseph Weber in Philadelphia

The Corporation

TRANSPORTATION

UNITED WANTS THE WHOLE WORLD IN ITS HANDS

Foreign routes are where the growth is—and where the risks are

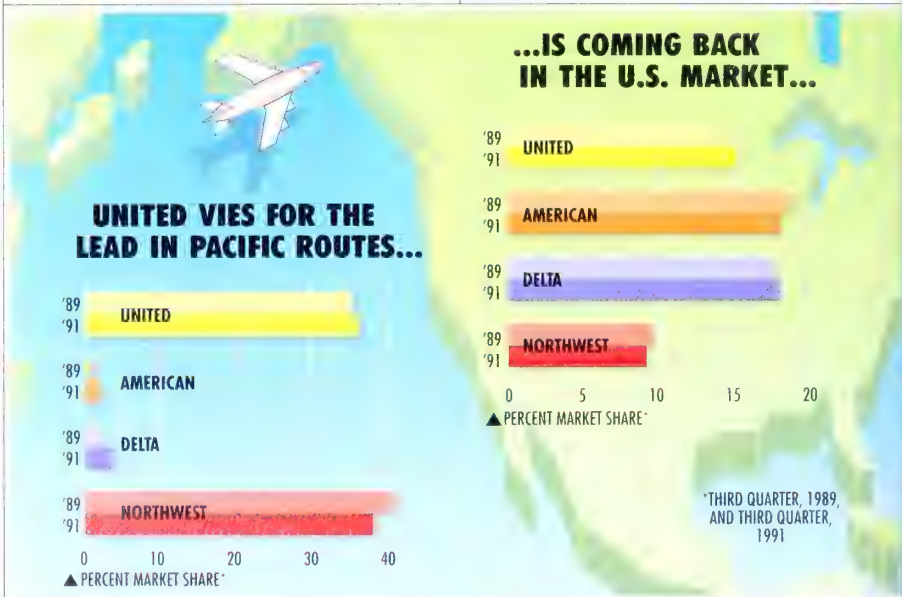
It's not that UAL Corp. Chairman and CEO Stephen M. Wolf dismisses Apr. 9 as just another day in the airline business. That morning, American Airlines Inc. Chairman Robert L. Crandall announced sweeping changes in domestic ticket pricing. While Crandall was still explaining the strategy at a press conference, United responded that it would match the move. But the truth is, most of the big plans that day at United Airlines Inc. had little to do with the U.S. market. Just back from Southeast Asia, Wolf was studying opportunities for United to begin flying to Hanoi. He met with company executives to discuss United's startup service from Los Angeles to Mexico City, and to Milan and Rome from Washington. Says Wolf: "The opportunities are so much more significant in the international arena."

Thanks to Wolf, no U.S. airline is better positioned than United to seize them. He has reached that destination in an astoundingly short time. Just two years ago, United seemed ready to implode as its labor unions plotted a \$4.4 billion buyout that would have cost Wolf his job. But in October, 1990, the buyout effort failed. Since then, Wolf has aggressively outbid rivals for choice routes and built the only airline worldwide with

major operations in the North Atlantic, the Pacific, and Latin America. Last year, the CEO inked deals with all three United unions, winning labor peace that had evaded the carrier for seven years. And after several years of losing share domestically, United is coming back.

NOT MUCH ROOM. Now, United is poised to soar past its rivals to become what no U.S. airline has ever been: a globe-girdling megacARRIER with strong domestic routes to feed the system. "Wolf has repositioned United as a major airline," says County NatWest Securities Corp. analyst Rose Ann Tortora. "Now he has to implement the global strategy without misstepping too dramatically." If he succeeds, adds Boston Consulting Group Inc. transportation specialist Harold Sirkin, "United can end up as the industry leader."

Yet having gone global, Wolf now has a larger set of problems. In Europe, protectionist sentiment threatens to slow all U.S. carriers' expansions. A recession in Japan could impede United's success in the Pacific. Its operations there were battered last year by the gulf war. Back home, sluggish demand makes it tough to turn profits. And Wolf has little room for error. The industry is coming off two terrible years, and his airline was hit



ardier than many. United lost \$332 million on revenue of \$11.6 billion, compared with American's loss of \$240 million on \$12.9 billion, and Delta's \$239 million loss on \$10 billion in the 1991 calendar year.

The short term promises more of the same. While American will reap a profit in the first quarter, United will lose around \$70 million, analysts say, as it pours money into expansion and suffers the effects of recession in Japan and the U.S. "It frustrates me that we're doing so many things correctly but losing so much money," says Wolf.

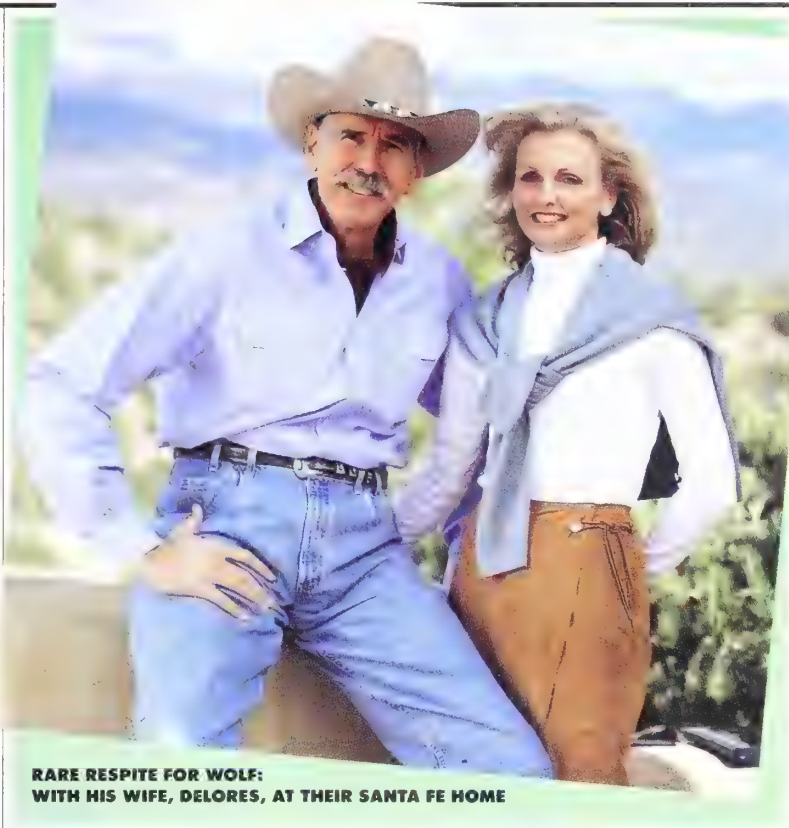
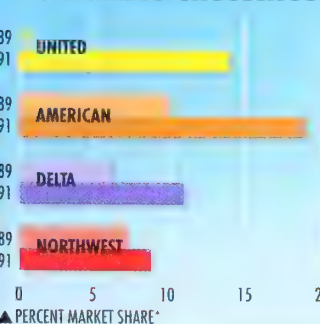
But long-term, he expects strong profits. To reach that goal, his ultimate focus will be on international expansion," says Wolf. It's

not hard to see why. Domestic travel will grow just 2% to 3% in the next few years, while Pacific travel is expected to rise by 7% to 9%, and European and Latin American travel by 7%. Wolf is allocating resources accordingly. United has deferred narrowbody aircraft ordered for domestic expansion and accelerated delivery on widebody aircraft needed in foreign markets. In 1992, United's international capacity will grow 10%; domestic, just 1.6%.

The carrier has already had huge success with its trans-Pacific routes. Pursued



...AND IS GAINING ON ATLANTIC CROSSINGS



RARE RESPITE FOR WOLF:
WITH HIS WIFE, DELORES, AT THEIR SANTA FE HOME

chased for \$750 million in 1985 by United's then-CEO Richard J. Ferris, the routes have become a cash cow. Since 1986, United steadily increased its share of that market among U.S. carriers from 19.2% of passengers in 1986 to 36% in 1991, snatching high-paying business travelers from Northwest Airlines Inc. (chart) and competing Asian carriers.

TOKYO RISE. Tightly controlled capacity on Pacific routes makes them doubly attractive, and United's two biggest rivals have been largely shut out. American's Crandall remains bitter over having lost out to United in late 1990 when the Transportation Dept. assigned a newly available Chicago-to-Tokyo route. "The fact is, there is only one market in Asia where people make money, and that's Tokyo," says Crandall. "And we can't get routes to Tokyo."

But can United resurge in the Pacific while a recession develops in Japan? United's answer: a hopeful yes. Executives note that 48% of passengers who use United's North Pacific service fly beyond Japan or directly to other cities in the region, such as Singapore and Hong Kong. United is convinced the popularity of its six-month-old Connoisseur Class for business passengers will help it take more share from other carriers.

Wolf is building a particularly ambitious strategy in Europe. United had little presence there until October, 1990, when Wolf put down \$400 million for Pan Am's routes to and from London's Heathrow Airport. United flies to 11 cities now. But unlike American, which

runs only direct flights between U.S. and European cities, United is building hubs in London and Paris, with connecting flights, or spokes, across the continent.

ONE A DAY. Crandall calls Wolf's approach flawed. United is permitted only one connecting flight for each plane flown into its hubs. Such poor aircraft utilization makes these flights almost certain money-losers, Crandall says. But Wolf says the flights within Europe will channel enough people onto transatlantic flights back to the U.S. to make it all profitable. So Wolf uses huge, 244-393-passenger Boeing 747s for about half of its transatlantic flights.

Even as the French government fights to roll back capacity increases, Wolf is scrambling to build United's presence on the Continent. In April, United started service from San Francisco to Paris and will add Paris to Athens, Milan, and Rome in June. United's goal, Wolf says, is not only a commanding share of the transatlantic market—it has 14% and American 19% among U.S. carriers—but also a significant presence inside Europe.

United has also been pouring resources into starting up its new Latin American routes. Last December, Wolf outfoxed rival carriers American and Delta to snap up Pan Am's routes for \$135 million. A bankruptcy court blocked his acquisition of Pan Am's facilities or planes, though. So United had only four weeks to set up reservation offices and generate name recognition.

But the airline hasn't missed a beat. Wolf assembled SWAT teams from Asia, Europe, and the U.S. to open offices. In Mexico, the crew managed to have a phone system for agents installed in 48 hours, an almost unheard-of feat for Teléfonos de México. And the carrier has hired local advisers to help avoid gaffes. When it started flying the Pacific in 1986, for example, United's workers wore carnations—a symbol of death in some Asian cultures. The carrier is running 11 flights to Latin America.

United has come a long way since then-CEO Ferris' ill-conceived plan to build an integrated travel services company nearly tore the carrier apart in the mid-1980s. United pilots, enraged, struck the airline in 1985 and grounded it for 29

IN A CATEGORY OBSOLETE AND LIGHTER, COMPAQ VS. ANOTHER ADJUSTABLE

Make it smaller. Make it lighter. Make it lighter. Make it smaller.

These must be the mandates emblazoned upon every R&D document handed to the engineers of today's crop of notebook computers.

Admirable goals to be sure. Goals that the engineers at Compaq, however, believe fall well short of making the most of portable computing.



Accurate to within minutes, the COMPAQ Power Smart Pack battery gauge clearly displays remaining battery life at the touch of a button.

Which explains why the latest 386SL notebook technology from the labs in Houston — the new COMPAQ LTE Lite/25 and LTE Lite/20 PCs — are not only the lightest (a scant 6 lbs.) and the smallest (only 8.5" x 11" x 1.75") notebook PCs that we've ever built. They're also the smartest.

The COMPAQ Hibernation feature saves all open files to the hard drive and turns the unit off, either upon request or as an automatic feature. Power up the COMPAQ LTE Lite later and you're back exactly where you left off.

THE BRAINS BEHIND THE OPERATION.

When it came time to design a new notebook, we started (logically enough) with the battery.

The new COMPAQ Power Smart Pack battery in our new notebooks delivers up to 4.5 hours of computing, a full hour longer than most.

A microprocessor inside the battery itself monitors current usage levels and continually calculates the available power remaining.

It can even instruct the notebook to save all open files to the hard drive should the battery power run too low.

And the energy-saving features in our newest notebooks go far beyond the presence of an Intel 386SL chip.

To make the most of the smarter battery, the new COMPAQ LTE Lite also comes with user-adjustable power-drain settings, and three dif-



ferent sleep modes — System Idle, System Standby, and Hibernation.

A MOST MODERN MODEM.

Our optional 9600-bps modem for the COMPAQ LTE Lite PCs would make even Alexander Graham B. proud.

The COMPAQ Enhanced 9600-bps



Internal Modem is compatible with the broad base of today's communications protocols.

Just slip the COMPAQ LTE Lite into the COMPAQ Desktop Expansion Base and you're instantly connected. Expansion slots, external ports, and mass storage bays give you immediate access to monitors, networks, hard drives, tape drives, CD-ROM and more. And all the while, built-in security features ensure a safe harbor for your notebook.

In modem talk, that means true V.32 9600-bps data transmission and V.42bis compression for up to 38.4 kbps throughput, as well as full support for Hayes AutoSync.

This little marvel negotiates the fastest transmission throughput that the other end of the line can muster, whether it's sending or receiving.

It even drops to a low power-drain standby state and monitors incoming signals if you're waiting for a call to come in.

Or for that matter another modem to catch up. **NOT ONLY SMART, BUT BRIGHT.**

The new, efficient COMPAQ Maxlight VGA display makes for a much brighter screen than our previous notebooks, and does it without sacrificing battery life.

Sharper graphics and text in up

ED WITH SMALLER ULD LIKE TO SUGGEST TIVE: SMARTER.

4 shades of gray complement an advanced video subsystem that's so it virtually eliminates "subma-
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the U.S. at 1-800-231-0900, Ext. 100, or
in Canada at 1-800-263-5868, Ext. 100.

COMPAQ



Actual weight: 6 lbs. Actual dimensions: 8.5"x11"x1.75" Actually, this is the best notebook we've ever built.

HE GETS BY WITH A LOT OF HELP FROM HIS FRIENDS

Last December, top executives of UAL Corp. were in a tight spot. Rivals American and Delta had teamed up to outbid its \$84 million offer for defunct Pan Am's Latin American routes. So Vice-Chairman John C. Pope, Senior Vice-President Lawrence M. Nagin, and their lawyers huddled around the pay phone outside Judge Cornelius Blackshear's chambers in the cavernous federal bankruptcy court in lower Manhattan. Passing the receiver back and forth, the group took turns plotting strategy with United Airlines Inc. CEO Stephen M. Wolf, who was ensconced in a nearby hotel room.

Others, including Executive Vice-Presidents James M. Guyette and Joseph R. O'Gorman Jr., play vital roles in day-to-day operations. "But if Wolf is making a big decision," says one United manager, "he leans on the inner circle."

Team-building is a Wolf watchword. "You win ballgames with good ballplayers," he says. While running Republic Airlines Inc. in 1984, and later as CEO at Flying Tigers Inc., he assembled close-knit management teams that helped revive the carriers and lure Northwest Airlines Inc. and Federal Express Corp. as buyers. When he landed at United, Wolf tapped some of those colleagues. Nagin was a deputy at Flying Tigers. Pope rose through the ranks with Wolf at American Airlines Inc. in the 1970s. Even Wolf's wife, Delores, whom he married in 1987, is a former executive at American.

The circle's members have complementary talents. Pope, considered by many the industry's aircraft finance guru, oversees United's finance and marketing. Having built a solid reputation at American, "he has the most independent voice," says one former executive. Nagin, who worked on Robert F. Kennedy's 1968 Presidential campaign, runs the carrier's legal and public relations activities and is considered the keeper of Wolf's image.

George, a lawyer, manages employee relations and negotiated the latest union contracts.

The team approach doesn't prevent Wolf from becoming involved in minute decisions. His counterpart at American, Robert L. Crandall, may preach "competitive anger" as the key to success; Wolf says, "We'll win by doing the little things right." Just recently, he participated in discussions about how big the closets should be in United's new Connoisseur Class. Working 18-hour days, with rare respites at his vacation home in Santa Fe, N. M., Wolf is also not shy about telephoning top managers at dawn to press for information about a project. Such are the rewards of belonging to an inner circle.

By Kevin Kelly in Chicago

days. When the strike ended, the pilots sought to dump Ferris by buying the airline. Their \$2.5 billion bid failed, but Ferris was let go.

Wolf was tapped in December, 1987 to rebuild United. An industry boy wonder, he had saved and sold off both Republic Airlines and Flying Tigers Inc. Much of his success then was attributable to a rapport with labor. But buyout fever botched things at United. By late 1989, he had seen United through four failed buyout attempts and won the enmity of its unions. Wolf's 1990 \$18 million compensation package—bloomed by cashed-in stock options—made him a symbol of corporate greed.

McBRAINSTORM. "Growth," Wolf says now, "has helped heal the wounds." So has an ability to lure talented managers (box). Travel executives give Wolf special praise for his hire in late 1990 of Adam Aron, senior vice-president for marketing. Creator of "the Hyatt touch" campaign with Hyatt Hotels Corp., Aron has significantly improved service at United. Aron played a key role in creating the Connoisseur Class that has won plaudits from international business travelers. And while United's domestic service still lags behind its competitors', Aron has wrought improvements there as well. It was his brainstorm to serve McDonald's lunches for children traveling to vacation mecca Orlando.

Former critics are impressed. Phil Davidoff, president of the American Society of Travel Agents, says politely that United workers were "complacent" in the late '80s. "They've recovered from that well," he says. United's in-flight service "is good and getting better."

Wolf has also moved to bring down United's growing costs, which are higher than Delta's and American's. In February, he deferred delivery of 122 planes, saving \$6.7 billion. He's also modernizing the fleet—leasing aircraft that will haul more passengers, burn less fuel, and require less maintenance. And Wolf has sliced \$300 million from the company's 1992 operating budget and imposed a hiring moratorium. Says Vice-Chairman John C. Pope: "We're taking these steps now so we don't have to cut back on our growth later."

Wolf appears fully confident that growth will be big. "Our best days are before us," he says. He has even placed a bet on it. In February, he bought 20,000 United shares, at an average price of 150 per share, for \$3 million. On Apr. 14, the stock closed at 128%, for a paper loss of \$432,500. Wolf isn't worried: As CEO and as an investor, he says, he's in it for the long haul.

By Kevin Kelly in Chicago, with bureau reports



SENIOR V-PS GEORGE AND NAGIN, EXECUTIVE V-P GUYETTE, VICE-CHAIRMAN POPE (SEATED)

The team suggested, and Wolf agreed, that United cede Pan American World Airways Inc.'s New York-Mexico City route to Delta Air Lines Inc. Having won that, they figured, Delta would drop out of the bid. That's just what happened. And American Airlines Inc., faced with a new, \$135 million bid from United, beat a hasty retreat. It was classic Wolf: decision-making by a trusted group, with Wolf in on all the details.

TEAM SPIRIT. United's lanky CEO may sometimes appear aloof, but he's no loner. In his five years with United, Wolf, 50, has relied on a tiny coterie of advisers to help him run the airline. That group includes Pope, Nagin, and Senior Vice-President Paul G. George.

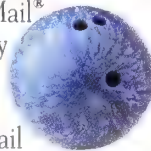


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Creating a letter in Word for Windows
takes only 12 steps: 1. Start a new document.
2. Type the letter. 3. Save the document.

Exotic Excursions
23 Cajun Court
New Orleans, LA 36857

May 15, 1992

Steve Sullivan
8762 W. 180th Pl.
San Diego, CA 98034

Dear Steve:

During the past two years **Exotic Excursions** has seen a record 200% growth in revenues. This success has been exciting, but we now must adjust for our very fast growth. The size of our office impedes proper customer service and is inadequate for the increased level of store traffic.

- I propose that we open another **Exotic Excursions** office, since our phenomenal growth of the past three years is likely to continue.
- **Thousands of potential clients will attend the grand opening of the new Exotic Excursions office.**

My staff are currently inspecting some potential locations in the Bay Court Plaza. Rental agents have told us that almost 10,000 people pass through this retail space weekly on their way to offices, restaurants, and shops. The table below shows cost projections for three different space configurations.

Location	Floor	Meeting	Bath	Street	Cost/Sq.
Court A	4500	N	Y	Main	\$2100
Court B	2100	N	N	Main	\$590
Court C	3400	Y	Y	52nd	\$1000

I recommend that we lease the Court C location. The
It is substantial.

Word for Windows has an
on-screen "redo" button
that lets you add
rows almost instantly.

Exotic Excursions
23 Cajun Court
New Orleans, LA 36857

Steve Sullivan
8762 W. 180th Pl.
San Diego, CA 98034

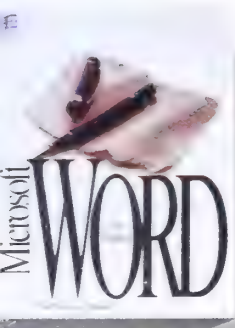


Bold or italics.
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No wonder WordPerfect users prefer Word for Windows. It has easy written all over it.



In a recent test conducted by the National Software Testing Labs (NSTL), nearly eight out of 10 WordPerfect for DOS users preferred Microsoft® Word for

Windows® 2.0 over WordPerfect for Windows. The reasons were plenty.

They were amazed at how Word for Windows put them one step away from accomplishing everyday word processing tasks with, in many cases, one simple click of the mouse. Which may have surprised them. But it didn't surprise us. After all, we designed Word for Windows around them.

Every week during the development of Word for Windows, we invited WordPerfect users to bring in their letters, memos, or whatever business documents they use in their own jobs, and try them out using Word for Windows. Our Product Development

people at Microsoft called these sessions "usability studies." Which is just a fancy, shorter way of saying "what-do-people-use-a-word-processor-for-and-how-can-we-make-it-easier-for-them-to-use-it."

These studies not only helped us to design features that make everyday tasks easier, but helped us to make the more advanced word processing features like grammar checking, drawing and charting, easier to use as well.

See for yourself why nearly eight out of 10 WordPerfect users preferred Word for Windows, and take advantage of our special \$129 offer,* by calling (800) 323-3577, Dept. Y78. If, for any reason, you're not completely satisfied with Word for Windows 2.0, we'll gladly return your purchase in full.** If you'd like, we'll also send you the files you need to test Word yourself. Then you, too, can have the last word on ease.

Microsoft

HOVNANIAN IS PUTTING ITS HOUSE IN ORDER

The builder weathered the slump and is eyeing new markets

For much of the 1980s, about the biggest problem facing home-builder Hovnanian Enterprises Inc. was crowd control. Its affordably priced town houses and condos were in such demand that every time the Red Bank (N.J.) company opened a new development, prospective buyers camped out overnight to be at the front of the line outside the sales office. For Hovnanian, it was pure bliss: Profits soared from \$4.7 million in 1984 to \$28.8 million five years later.

Ah, memories. When real estate turned sour in 1990, the lines went away, profits plunged, and Hovnanian's stock went into a free-fall. Hovnanian didn't help matters by falling out of step with the housing market. As consumer tastes shifted away from its bread-and-butter two-bedroom condos to single-family homes over the past few years, Hovnanian was slow to catch on. Meanwhile, an unsuccessful expansion in the late 1980s in New York and New Hampshire, plus stiff competition in Florida, led to a \$14 million writedown for fiscal 1991. Hovnanian's \$15.2 million loss for the year was the first since it went public in 1983.

JERSEY BOUNCE. Yet despite the short-term damage, the real estate industry's woes may have helped Hovnanian immensely. Many smaller, privately held builders have either scaled back or gone out of business. In New Jersey, Hovnanian saw its market share rise to about 10% last year, vs. 3% in 1984. "The credit crunch gave larger, well-capitalized developers an advantage," says President Ara K. Hovnanian,

who runs the company along with his father, Kevork S. Hovnanian, the 63-year-old chairman. An Armenian by descent, Kevork came to the U.S. from Iraq in the 1950s and started building homes with his brothers. Kevork split off to found the predecessor to Hovnanian Enterprises in 1959. Its mission: selling decent, inexpensive homes.

trols more than 15,000 homesites—about a five-year supply. To accelerate building, Hovnanian may start buying up some of its competitors: The company is raising \$100 million in a new offering of subordinated notes, a portion of which it may use for acquiring its way into the Washington (D.C.) market.

FLORIDA SWAMP. Analysts praise Hovnanian for wanting to move beyond New Jersey, which accounts for three-quarters of its revenues. But previous attempts to expand haven't worked out so well. A decade ago, Florida became Hovnanian's biggest market. Today, profits are hard to come by in that overbuilt and intensely competitive state. Hovnanian has had to auction off some of its properties there, and it has stopped building condos except when they are part of a resort.

Diversifications into New Hampshire and suburban New York were even more trouble. The company entered both markets when the cost of land was peaking, eliminating Hovnanian's traditional low-price advantage. It has had to sell most of its properties there at deep discounts. One bright spot is North Carolina, where Hovnanian owns 85% of builder New Fortis Corp. Last quarter, orders jumped 190%.

These days, Hovnanian is counting on a better product to help it gain a footing in new markets. After real estate began to soften in 1988, the company stepped up its market research to find out what customers wanted most. The result is a new line of town houses with garages, basements, cathedral ceilings, and family rooms. Starting at around \$85,000 in New Jersey, they are designed to look more like single-family homes and less like condos.

Thanks to strong consumer acceptance of the new town houses, Hovnanian earned \$2.5 million, or 11¢ a share, in the year ended Feb. 29. This year, Prudential Securities Inc. analyst Lawrence J. Horan expects it to earn \$18 million, or 80¢ a share, on revenues of \$469 million. True, the company still has a long way to go before matching the glory days of the mid-1980s. But unlike many of its competitors, Hovnanian at least has a future to build toward.

By Monica Roman in Red Bank, N.J.

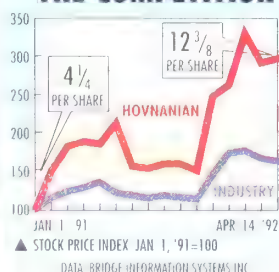


KEVORK AND ARA HOVNANIAN: NEW JERSEY MARKET SHARE IS UP FROM 3% TO 10%

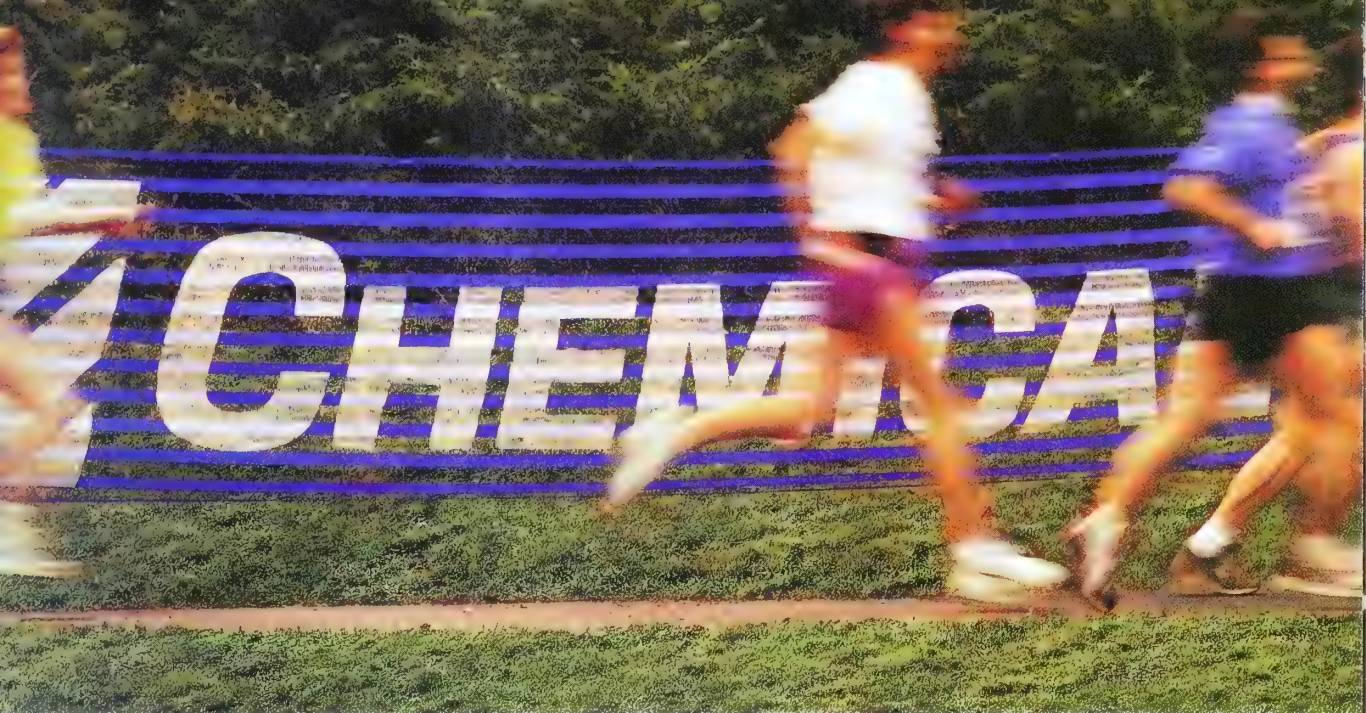
Hovnanian's advantage is already starting to pay off. Sparked by lower interest rates, orders were up 145% in the past quarter alone. The change in Hovnanian's fortunes has not gone unnoticed by Wall Street: Over the past year, its shares have far outperformed its rivals (chart).

Now, the Hovnanians, who control 70% of the company's stock, are talking expansion again. With land prices still depressed, in the past 18 months the company has acquired options to buy 4,400 lots in New Jersey and North Carolina at prices as much as 60% lower than in the mid-1980s. Hovnanian con-

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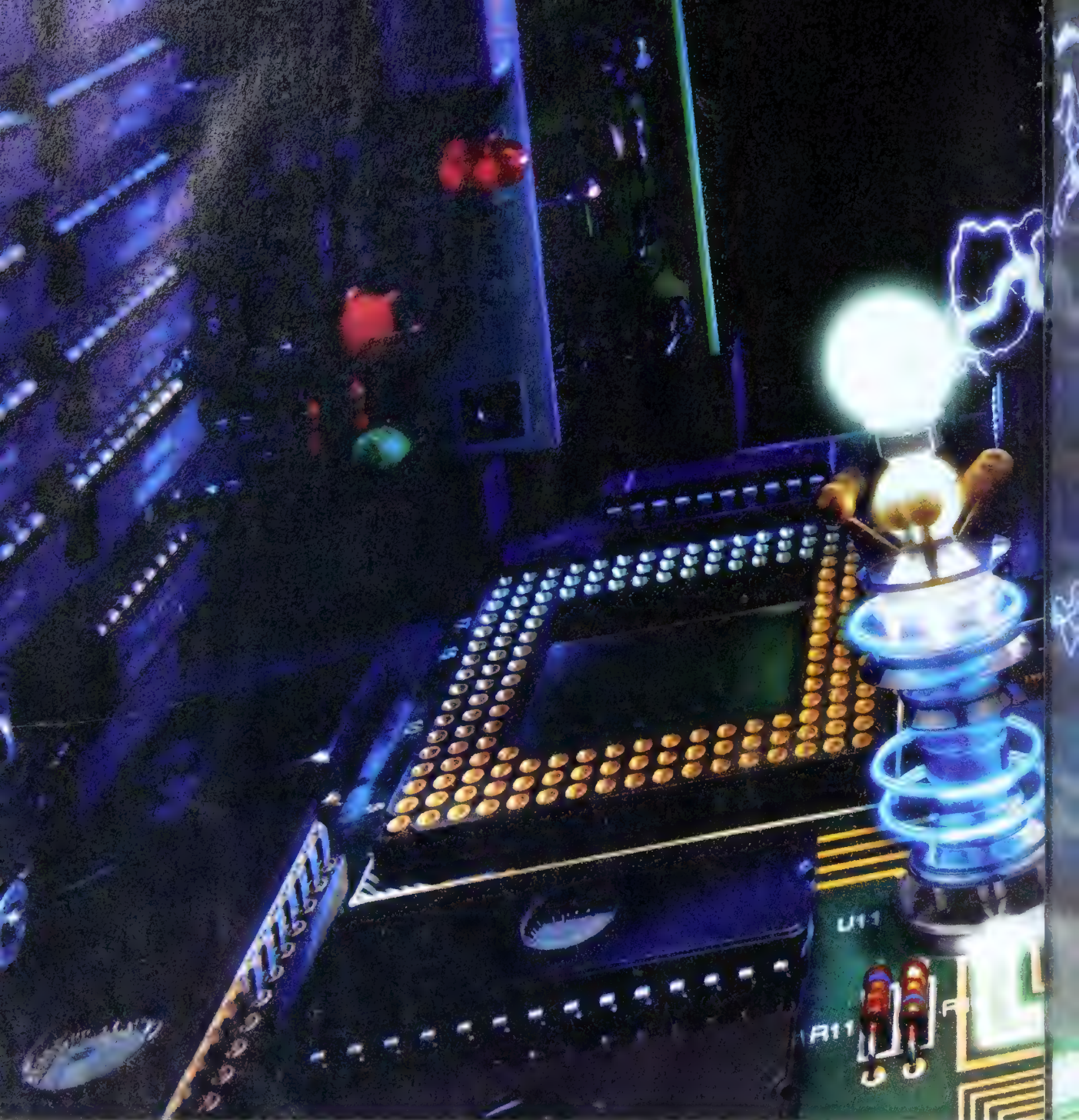
May 7	New York City (Race 1)	June 30	Philadelphia	July 30	Morristown	September 16	Atlanta*
May 19	Rochester	July 9	Buffalo	August 4	Syracuse	TBD	Dallas
May 21	Albany	July 15	London	August 6	Chicago	October 3	New York City—
June 4	New York City (Race 2)	July 23	Los Angeles	August 11	Stamford		Chemical Corporate Challenge
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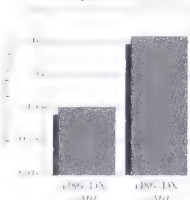
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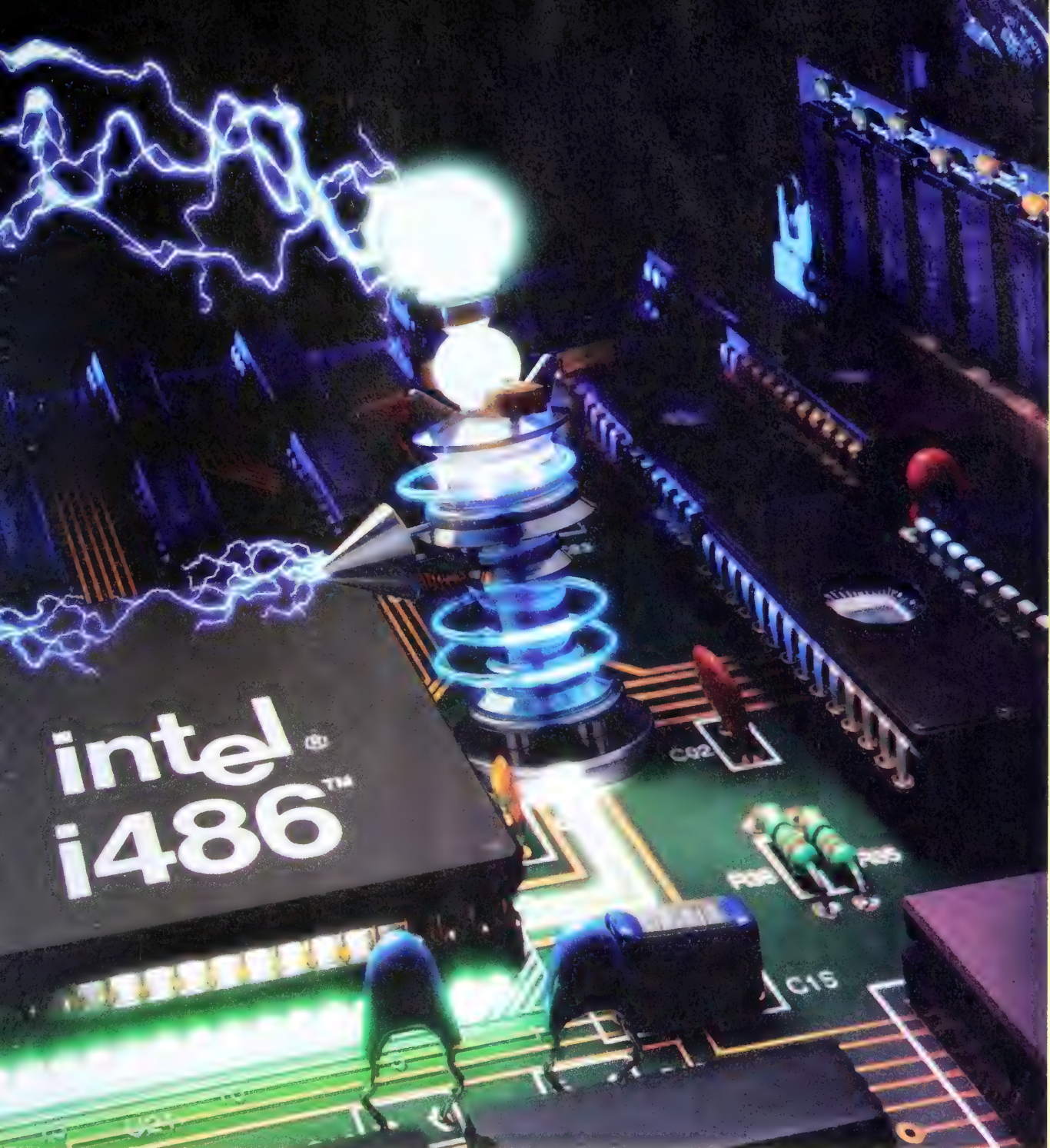
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CIRCUIT CITY'S WIRES ARE SIZZLING

This recession-beater is shaking up consumer electronics

Consumer electronics retailing is one crummy business these days. Last year, industrywide sales were flat, a far cry from the 20% annual growth posted in the early 1980s. Demand has tailed off for such must-have products as color TVs and videocassette recorders. Formerly robust chains are enmeshed in problems: In the New York area last January, Newmark & Lewis announced the liquidation of its last 26 stores, while 47th Street Photo Inc. entered Chapter 11. In the Midwest, the Highland Superstores chain, once 92 stores strong, is immersed in restructuring talks with creditors.

So it's no wonder that investors were taken by surprise on Apr. 6, when Circuit City reported results for its fiscal year ended Feb. 29. Earnings soared 38%, to \$78 million on revenues of \$2.8 billion, up 18%. Same-store sales, up only 1% in 1991, also resumed climbing in 1992, to 3% in March. Shares in this operator of 185 electronics and appliance superstores popped more than two points, to 34¹/₈.

How does the company, based in Richmond, Va., send out such a strong signal despite the industry's static? For starters, there's the nuts-and-bolts approach of Richard L. Sharp, Circuit City's chief executive since 1986. You could call him the accidental retailer: While most CEOs in the industry have taken the route up through merchandising, the 45-year-old Sharp is a techie who learned computer programming skills in the military.

SPEEDY DELIVERY. Those skills came in handy when Sharp helped Circuit City design a computerized inventory and distribution system unrivaled in the business. That system allows the company to closely track the shipment of nearly every box traveling to all of its 229 locations, including the superstores as well as a new group of tiny boutiques operating under the name of Impulse. Inven-

tory arrives when it's needed, not a moment sooner or later. The chain's heavily automated shipping system can also move more than \$350 million in goods a year through its Atlanta warehouse with just 13 floor workers. Says Goldman, Sachs & Co. analyst David A. Bolotsky: "This company is run by perfectionists."

It may not be glamorous, but the low-cost distribution system adds as much as one percentage point to Circuit City's pretax margin of 4.5%—spectacular in an industry that overall is barely break-

new markets aggressively, saturating a metropolitan area with its 30,000-square-foot superstores. That strategy provides the critical mass to justify a barrage of newspaper advertising. In Houston, Circuit City has garnered a 20% market share after opening five stores on the same day last August. "It's kind of like *Field of Dreams*: 'If you build it, they will come,'" says Sharp. Also key to Sharp's marketing formula are Circuit City's knowledgeable salespeople and wide product selection: The superstores carry more than 150 models of televisions and more than 50 different kinds of refrigerators.

COUNTERATTACKS. Service and selection have helped Circuit City keep prices up in markets it dominates, such as the Southeast. But the chain is likely to see growing competition both from low-end retailers seeking to battle it out on price and high-end stores hoping to top it on service. Warehouse clubs, for example, offer scant selection but sell products at

near-wholesale prices in a bare-bones environment. Several, such as Price Co., plan to increase their offerings in consumer electronics.

Meanwhile, established competitors in electronics have been experimenting with new approaches. Best Buy Co.'s redesigned stores, which feature a no-frills decor, have been logging strong results in such markets as St. Louis. At the other end of the spectrum, this fall Tandy Corp. will open two prototype megastores called Incredible Universe outside Dallas and Portland, Ore. At 160,000 square feet, each of the Tandy stores will have 300 employees, 300 models of TVs, a restaurant, and a child care facility. "You can't even think of it as a store," exults Tandy Chairman John V. Roach. "It's a new retail shopping experience."

Competitors admit such radical experiments are necessary to combat Circuit City. "I don't think they can be slowed head-on. You have to go under them or over them," says Robert Sirkis, president of electronics chain Silo Inc., which is dueling with Circuit City in Philadelphia and Los Angeles. Sharp admits that he faces challenges but figures his format, with some fine-tuning, will wear well. Indeed, with Sharp's single-minded attention to the details, it's unlikely his company will short-circuit any time soon.

By Dean Foust in Richmond, Va.



SHARP'S IMAGE: CIRCUIT'S CEO IS A TECHIE WITH MARKETING FLAIR

ing even. "It all comes down to who can execute most efficiently in the back room," Sharp says. To trim overhead further, last year he installed new software in the cash-register system that gives the chain an even tighter grip over inventories. In an industry notorious for heavy theft—often by employees—analysts estimate the new system has trimmed losses from "shrinkage" by as much as 30%, to less than half the industry average.

Technoid though he is, Sharp is no slouch at marketing. Circuit City invades

See Chi Chi Do The Cha-Cha.



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P E N A D V A N T A G E.

ROSS PEROT'S GRASS-ROOTS ARMY

Now, CEOs are lining up next to blue collars and the disenchant

In the past few weeks, an amazing phenomenon has swept through America's politics as insistently as tumbleweed prowl its prairies. In astonishing numbers, frustrated and angry voters are looking hard at a razor-tongued, no-nonsense nonpolitician with an attitude—and a couple of billion in the bank: Henry Ross Perot. "In modern political history, this is the first real grass-roots movement we've seen," says Republican consultant Lisette McSoud.

How real? A recent ABC News/*Washington Post* poll showed Perot getting 24% of the vote, just 14 points behind President Bush and 4 points less than Arkansas Governor Bill Clinton, the all-but-sure Democratic nominee. If the founder of Electronic Data Systems Corp. goes for it this fall, he could

be the most significant independent candidate for President since Theodore Roosevelt thwarted Republican William Howard Taft's reelection in 1912 with his Bull Moose insurgency. At the least, Perot will influence the political debate.

'BRUTAL JOB.' Like Teddy Roosevelt, Perot carries a big stick—but he rarely speaks softly. To anyone listening, Perot barks that he's sick and tired of lack of leadership in Washington and that he is reluctantly prepared to rescue the nation from the scourge of professional politicians and pointy-headed bureaucrats. "I don't want this job," Perot told *BUSINESS WEEK*. "This is the dirtiest, most thankless, most brutal job in the world."

Yet this 5-foot, 6-inch bundle of raw nerve and manic energy is pursuing his noncandidacy with the same determination he used to build EDS from a \$1,000 investment into the data-processing giant that he sold to General Motors Corp. in 1984 for \$2.5 billion. And with the same zeal that makes Perot, at 61, an avid jogger, biker, and windsurfer. Once he sets a goal, associates say, he'll do—and spend—whatever it takes to meet it.

That combination of deep pockets and populist appeal could make his crusade far more than an ego trip. Despite wide-

spread anger at bloated executive paychecks, Americans don't seem to resent Perot's self-made billions. He's winning support from blue collars and CEOs alike. Bear Stearns Chairman Alan C. "Ace" Greenberg, a political independent, says Perot will be "good at anything he does. If he decides to run, I'll support him." Josh S. Weston, CEO of Automatic Data Processing Inc., agrees. Adds Texas timber baron Arthur Temple, a conservative Democrat and former Time Inc. director: "Right now, we'd settle for some people who can add up their checkbooks."

Among other blue-chip names who want to see Ross run are New York attorney Melvin Weiss and Robert L. Crandall, CEO of AMR Corp., who has signed a petition to place Perot's name on the ballot. "He's an immensely talented guy," Crandall says. "It would be good for the country... to have a chance to hear his platforms."

Far more important to Perot, who doesn't need money from the business Establishment, are the more than 1.6 million Americans who have dialed his 800 number since he hinted at a run in March. The middle-class "Perot-nistas" see their man as the resolute leader the U.S. needs to set things right. Says his Virginia coordinator, Pat Clawson, owner of Metrowest Broadcasting: "I've got Jesse Jackson supporters. One is fresh from the Tsongas campaign. Another is a die-hard Reaganite. The only common thread is that they are fed up."

GAFFE GAP. Like his supporters, Perot's positions are all over the political landscape. His platform, such as it is, is a hodgepodge ranging from requiring a referendum to raise taxes to instituting nationwide electronic town meetings. He'd balance the budget by weeding out \$180 billion in "fraud and abuse," finding \$100 billion in lost taxes by modernizing collection, forcing allies to pony up \$100 billion for defense, and saving \$20 billion with cuts in entitlements to rich people like himself.

Although Perot is a concern to both



major parties, the Republicans probably have the most to worry about. Polls show Perot's support strongest in the cities and suburbs, weakest in rural America. He draws the most interest in Texas, the West, and the Northeast. And Perot is getting disproportionate support from elements Bush needs to win: blue-collar Reagan Democrats and independent-minded suburbanites who are key in such battlegrounds as California, Florida, Illinois, Michigan, New Jersey, Ohio, Pennsylvania, and Texas.

GOP strategists fear Perot could hand a number of those states to the Democrats. That's why Bush aides are nipping the notoriously thin-skinned Perot, hoping to provoke an embarrassing gaffe. "Ross Perot has had this [campaign] on his mind for some time," says one Bush strategist. "The job of Pope is not available. This is as high as he could seek." Bush backers portray Perot as a spoiled rich man who happily uses the government when it suits his business, from Medicaid contracts to government grants for an industrial airport in Fort Worth surrounded by Perot property.

There's some evidence that the offensive is getting under Perot's skin. He calls Bush's Texas chairman Jim





Some of Corporate America's heaviest hitters have rallied to Perot, including 'Ace' Greenberg of Bear Stearns

wetter "Bedwetter" and describes as a man who "probably has trouble finding cat food." And Perot flew off the handle when asked to respond to a suggestion that he was "a MacNeil-Lehrer candidate in an *Entertainment Tonight* bid." Perot said the characterization hatched "in a dirty-tricks meeting last night. [A Bush aide] said: 'My call, BUSINESS WEEK. Get them to this question. It'll screw up Perot's bid for 20 minutes.'"

UNELECTABLE? Politicians may say that his outbursts make Perot unelectable, but his supporters see them as hallmarks of a forceful man who will bring change. Democrat Thomas D. Barr, a former litigator at Cravath, Swaine & Moore in New York who has represented Perot, says he is organizing for Perot because both parties are "incapable of changing the system, because they built the system." Darwin Deason, whose Affiliated Computer Systems in Dallas competes with Perot Systems Corp., supported George Bush four years ago but phoned Perot recently to volunteer. "I don't know that American business has ever had a stronger, more forceful, more dynamic leader," says Deason. "Those who have worked with Perot

give him mixed reviews. "He's a very results-oriented person, but [he] does not try to dictate the day-to-day operation," says Kern Wildenthal, president of the University of Texas Southwestern Medical Center, which got a \$20 million gift from Perot. But John W. McNulty, a retired GM executive, said Perot "never sat down and compromised" during his two stormy years on the carmaker's board. "I don't know if he can work within an ordered system."

And some longtime Perot-watchers are disturbed by his zealotry. During Texas' 1981 "War on Drugs," a former legislator recalls telling Perot "we don't have to dismember the Constitution and the Bill of Rights" to solve the problem. Perot's response: "This stuff is destroying our kids, and we have to wink and nod at some of those past precedents if they stand in the way." Today, he denies the conversation ever took place.

Perot appears to be inching toward a run. Murphy Martin, who helped Vietnam prisoners of war as president of Perot's United We Stand organization, remembers someone asking Perot why he never ran for office. Perot joked: "Why would I want to be President when I'm already king?" If he decides to

trade in his crown, Perot says he realizes he might quickly "get all cut to pieces" by the buzz saw of negative campaigning. But he reckons that the price of watching his country slide into permanent decline is far higher than the risks of a long-shot Presidential bid.

By Richard S. Dunham in Washington and Wendy Zellner in Dallas, with bureau reports

PEROT ON THE PODIUM

Pinning down Ross Perot isn't easy. "My least favorite thing to do is to be sound-bitten," he snapped as he began a question-and-answer session with BUSINESS WEEK's Dallas Bureau Manager Wendy Zellner and Washington Correspondent Richard S. Dunham. The conversation produced few policy prescriptions but nonetheless revealed Perot as a man of supreme self-confidence who believes he can work wonders with plain ol' common sense.

Q You've said that we need an industrial policy. Which industries would you target and who would create these plans?

A I don't think you can ever find that I have used the term "industrial policy"... In Japan, they have an intelligent, supportive relationship between government and industry... We have an adversarial relationship... Government seems to be preoccupied with trying to break industry's legs... The highest priority in our country is to stabilize the job base, because that will stabilize the tax base. Then, an equally high priority is to develop a growing, expanding industrial base, which will produce a growing, expanding job base, which will produce a growing, expanding tax base, which will give us the ability first to live within our means and secondly to pay down the \$4 trillion [national debt].

Q What industries would you target?

A You would target the industries of the future, obviously... Let me give you the simplest one... We created the integrated circuits... Today, 19 out of 20 integrated circuits used in the U.S. are made in Japan. There's an industry we just gave away. We are fast losing the automobile industry. That is certainly an industry of the future... It's fundamentally important that we maintain our preeminence in communications, in electronics, in computers... In the automobile industry, you're going to have to put together a task force of people who

Information is power.

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disposable picnicware with an attractive floral pattern.

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know the most about the automobile industry... The first thing you'll hear back from the car companies, and here's where the government comes in, is we have made the strangest trade agreements in the world with our international competitors. They have picked our pockets... Why? They know how to negotiate. The people we sent over didn't. And the people we sent over to negotiate know that if they keep their noses clean that in a short period of time, they can be hired for \$30,000 a month as a Japanese lobbyist.

Q *Would you favor sanctions against Japan to open markets?*

A No. Now what am I saying? I'm saying they've outnegotiated us, right? ... We're going to bring people in who know how to negotiate... I would ask for a law immediately from Congress that anybody that participates in this can't go over to the other side later. They can't cash in on having been around it.

Q *Can we negotiate a fair North American Free Trade Agreement?*

A I am for fair, free trade... [But] you realize that we have a very fragile situation as far as being able to pay our bills as a country... Now, what does Mexico pay its people? A dollar an hour. What do we pay our factory workers here? Say, \$17.50 an hour. Any health care in Mexico? Little or none. Any retirement? Little or none... I called a who's who of American manufacturing, and I said: "When would you build your next factory in the U.S. if this went through?" They laughed. They said: "We wouldn't." ... Then, I decided the guys that put this agreement together must know something I don't know. So I called some of them... and they said: "Perot, it would be disruptive." ... But they say eventually it will stabilize itself... It's somewhere between 15 and 20 years.

Q *Is any kind of trade agreement with them even possible, then?*

A You'd have to again bring the best people in industry together, develop a plan to phase it in, work with Mexico,

work with Canada to phase it in... [Even then], you'd better run pilot programs to make sure you don't have unanticipated adverse side effects that will really adversely impact our economy... You say, well my gosh, Perot, how can you sell that to Mexico and to Canada? Pretty simple... I can sell it to anybody. You know why? We're the biggest customer in the world.

Q *Should we change the tax code to spur R&D and business investment?*

A The tax code is a mess... We should replace our existing tax system, and

"electronic town halls" into effect.

A You could go to public television on Day One... You've got to have, more than anything else, a thorough, thoughtful, fair, balanced presentation of whatever the subject is... People who have cable, many of them, can react now, direct. Those who don't would have to use telephone calls... [Also], take a scientific sample and see how they correlate

Q *How do you pay for this?*

A I'd pay for it myself, if I had to... Let's assume it's going to cost a million dollars every time you do it. That's \$50 million a year. And you've empowered the American people... Everybody in Washington thinks it's weird. If I had Washington wired the way the special interests do, I'd think it's weird.

Q *Wouldn't the people you get to study these issues act as special interests themselves?*

A I [would ask] Congress to pass a five-year minimum jail term for anybody who does something crooked on this... We're going to have to find the finest people in America... What would I pay them? ... You wouldn't pay anything. They come to serve.

Q *Would you make cuts in "entitlements?"*

A A preeminent economist whose name you would recognize immediately told me that there's at least \$100 billion from people who get Medicare and Social Security who are so wealthy they don't need it... I would fall in that category. If someone came to me and said: "Perot, would you give up your Medicare and Social Security to balance the budget?" I'd say: "In a minute." ... Let's just write them and see how many would voluntarily agree to do it, because they don't need the money.

Q *Won't Americans be frustrated when they hear that your answer to every problem is to study it?*

A I'd say go vote for a sound-biter... Pick the person who can solve these problems for you, but don't be conned.

THE MAN WHO WOULD BE PRESIDENT

PEROT'S RESUME

- 1930** Born June 27 in Texarkana, Tex.
- 1949** Enters U.S. Naval Academy, where he's elected class president
- 1957** Leaves Navy and joins IBM as salesman
- 1962** Launches Electronic Data Systems, which he takes public in 1968
- 1969** Attempts to airlift 30 tons of food and clothing to American prisoners of war in North Vietnam
- 1970** Resigns as EDS president but remains chairman
- 1979** Hires a commando team that frees two EDS employees taken hostage in the Iranian revolution
- 1979** Leads Texas' 'War on Drugs,' resulting in 1981 legislation mandating harsher sentences and allowing wiretapping
- 1982** Provides \$500,000, at request of White House aide Oliver North, to buy the freedom of an Army general kidnapped by communist terrorists in Italy. Ransom is never paid, but the officer is freed by police
- 1983-84** Chairs blue-ribbon panel to reform Texas' schools, which results in revolutionary reforms (including smaller classes, teacher competency testing, and a requirement that high school athletes pass classes before they can compete) and is funded by the largest-ever tax increase in Texas
- 1984** Sells EDS to General Motors for \$2.5 billion, joins GM board
- 1986** Gets \$700 million from GM for his stake and leaves board
- 1988** Found Perot Systems, provoking a bitter court fight with EDS over his noncompete agreement

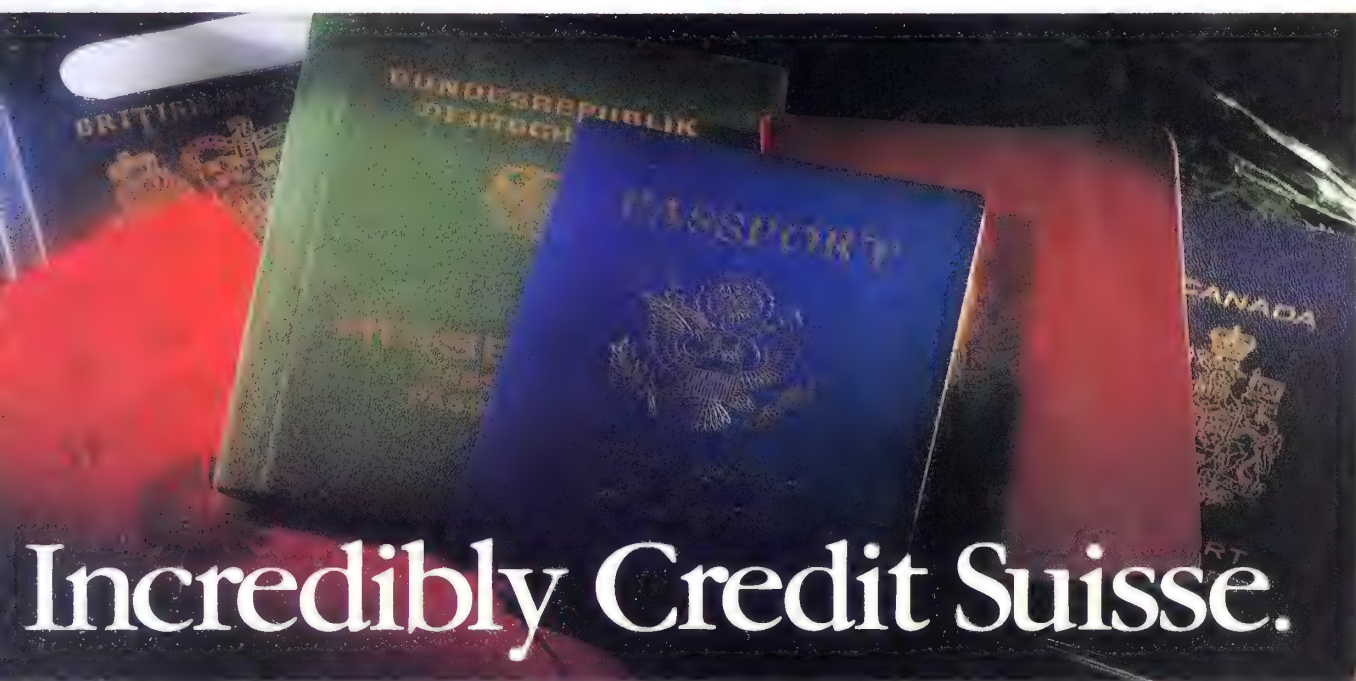
DATA-BW

with these criteria: It's got to pay the bills, it's got to be fair, and it should be generally paperless for most people, to get rid of most of the bureaucracy around the IRS... you bring together the people with the most experience... put together two or three plans... explain them to the American people in detail over television... get a consensus from the American people about what this new tax plan should be... Everybody says: "Perot, you don't understand politics." Well, I understand it doesn't work. I understand Congress and the White House are in gridlock... and the way to get them out of gridlock is to get the people to reassert themselves as owners of the country.

Q *How would you plan to put these*



Incredibly Swiss.

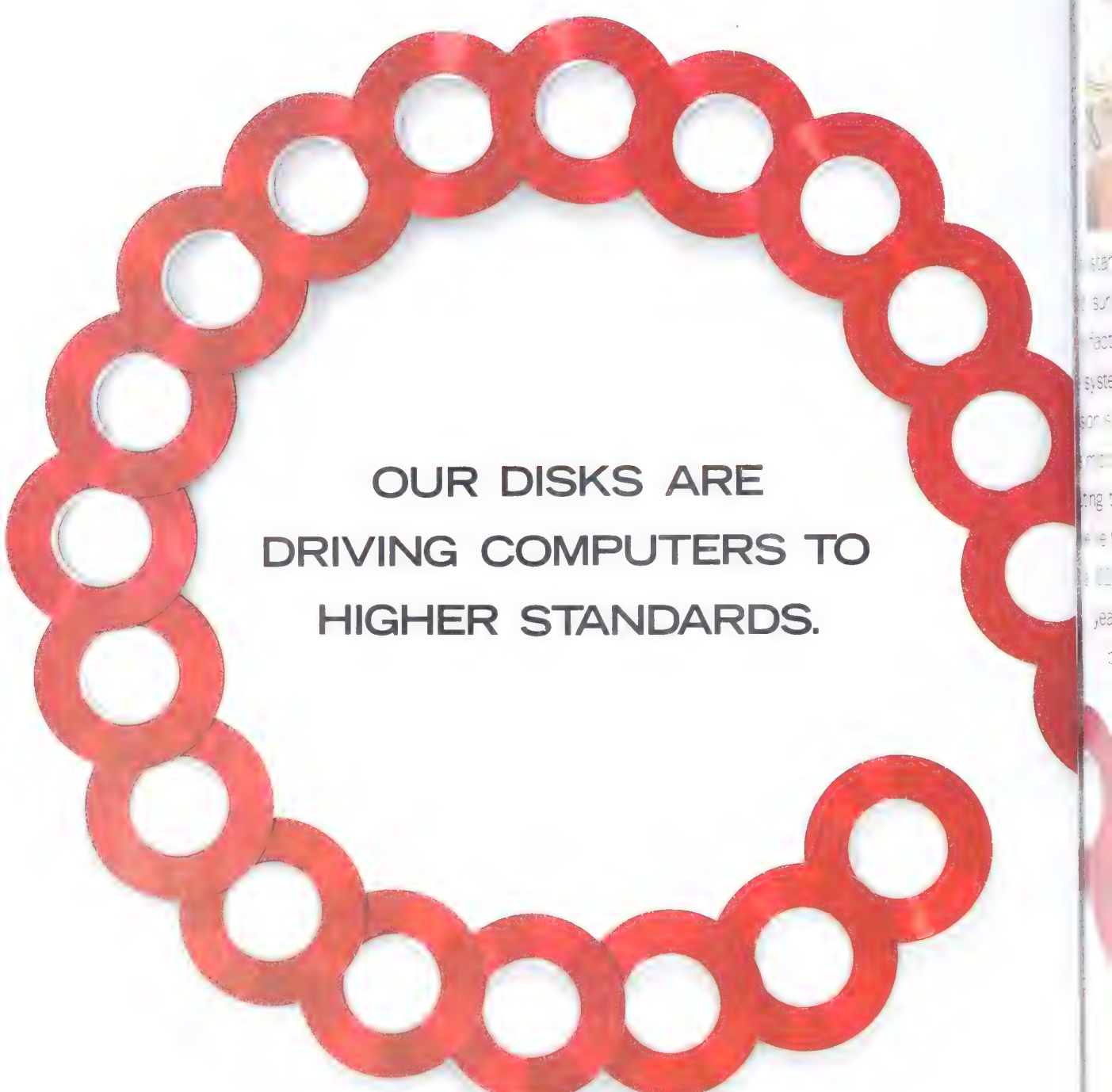


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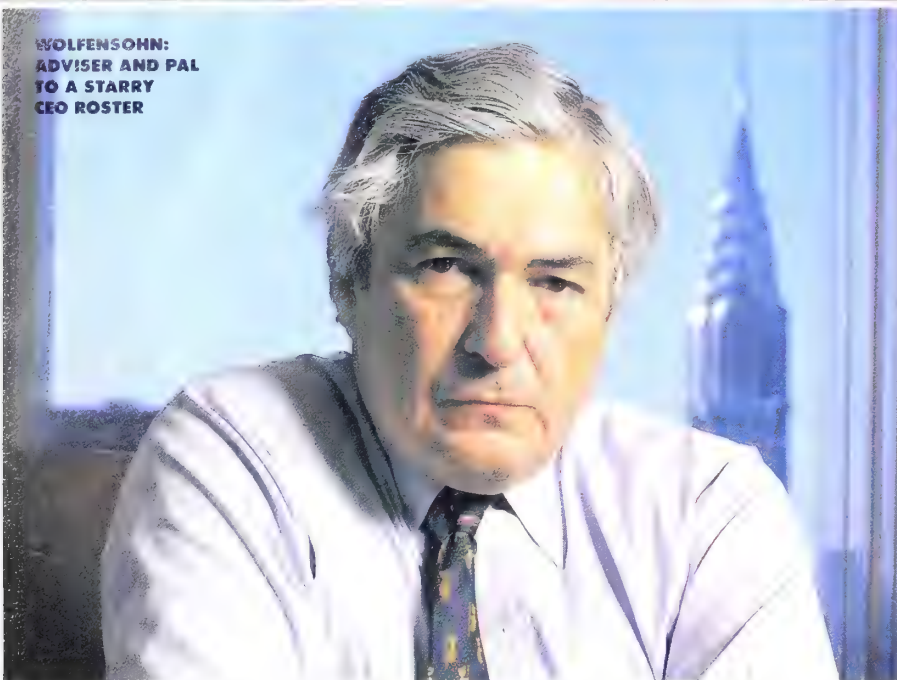
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optic transmission systems. Today, you'll find
those products in businesses all over
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∞
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COMPUTERS, COMMUNICATIONS, MICROELECTRONICS

**WOLFENSOHN:
ADVISER AND PAL
TO A STARRY
CEO ROSTER**



THE MAN WITH THE GOLDEN ROLODEX

Can Wolfensohn's clout and contacts help save the Reichmanns?

It was late March, and Olympia & York Developments Ltd.'s Paul Reichmann desperately needed to appease his restless bankers. His \$20 billion real estate empire was crumbling before his eyes. Reichmann signed on J. P. Morgan & Co. and Canadian broker Burns Fry Ltd., but he also recruited a small New York investment bank, James D. Wolfensohn Inc., as his adviser.

The firm provided Reichmann with something more valuable than real estate savvy: credibility. By hiring Wolfensohn, Reichmann got the services not only of its chief executive, James D. Wolfensohn, a former investment banker with Salomon Brothers Inc., but also those of Robert S. Miller Jr., the former vice-chairman of

Chrysler Corp., who played a key role working with banks on Chrysler's 1980 bailout, and Paul A. Volcker, the former Federal Reserve chairman. "We are the ones putting our reputations on the line," says Miller, who is advising Reichmann in Toronto.

Reputation is Wolfensohn's stock-in-

trade. Over the past decade, Jim Wolfensohn, the firm's 58-year-old founder who still speaks with a trace of his native Australian accent, has built a thriving business by cultivating an aura of prestige and probity around himself and his firm. Unlike most securities firms which have diversified into trading and underwriting—businesses that sometimes bring them into conflict with their clients—he maintains a purely advisory role, which has helped him develop close friendships with movers and shakers. Wolfensohn counts some 30 CEOs among his steady clients. "Jim is probably the most charming, worldly, sophisticated operator in the financial world," says a rival banker. "He has probably got the best Rolodex of any individual bar none. He makes Henry Kissinger look second-rate."

'TROPHY BANKER.' But competitors also claim his success is a triumph of atmospherics over substance. "You've heard of trophy wives. He's a trophy banker," says one. Says another: "He's one-third psychiatrist, one-third concierge, and one-third business adviser. If your jet breaks down, he will lend you his." Retorts Wolfensohn: "We've done over \$16 billion in transactions in the last two years. You don't do that by being a concierge." Clients agree. "He's a good person to bounce ideas off," says Vernon R. Loucks Jr., head of Baxter International Inc. "He is not looking to do deals but what makes good financial sense for the corporation."

Wolfensohn has woven together his business, personal, and philanthropic lives to form a single, reinforcing web of interests. He takes small groups of friends and an occasional client on fishing trips to Alaska but is careful not to talk business. He not only serves as chairman of the Kennedy Center in Washington, D. C., but is also an accomplished cellist who counts famous artists like Mstislav Rostropovich as friends.

Maintaining a high profile in the performing arts has been good for business. Take Edgar S. Woolard Jr., chief executive of DuPont Inc. Four years ago, Woolard invited Wolfensohn to speak about ethics at DuPont and subsequently became a client and a good friend. Wolfensohn later recruited Woolard to head a group of 25 business leaders who raise funds

CARDS FROM JIM WOLFENSOHN'S FILE

Wolfensohn's links with corporate chiefs combine business and pleasure

Longtime friends. Sat on Rockefeller Foundation board

Advised on purchase of C&S/Sovran. Has known McColl for 25 years

Serves on CBS board

Represented Du Pont in 1991 divestiture of coal division. Recruited Woolard to raise money for Kennedy Center

Advised AmEx on sale of subsidiary. Works with Robinson at Kennedy Center, Carnegie Hall

DATA BW

FORMER CHAIRMAN, CHASE MANHATTAN

HUGH L. McCOLL JR.
CEO, NATIONSBANK

LAURENCE TISCH
CEO, CBS

CEO, DU PONT

JAMES D. WOLFENSOHN JR.
CEO, AMERICAN EXPRESS

the Kennedy Center. When Du Pont and its coal business in 1991, Wolfensohn brokered the deal. "He has an unusual blend of skills, knowledge, and contacts that are very useful," says Volcker.

Volcker, who joined the firm in 1988, adds enormously to the firm's clout—and its mystique. "He has immense integrity," says Scott E. Pardee, chairman of Yamaichi Securities and a former Federal Reserve official. Recently, Volcker flew to Tokyo to host some 30 Japanese CEOs and meet with Bank of Japan head Yasushi Mieno. He then attended a Nestlé board meeting in Zurich and flew on to Moscow to talk to Russian President Boris Yeltsin.

Wolfensohn learned the value of contacts early. In his Manhattan office are photos of his three mentors: British financier Sir Siegmund Warburg, a master of old-fashioned relationship investment banking; Lord Richardson, who ran Schroders Inc., the British investment bank where Wolfensohn worked in the 1970s; and William Salomon. As head of Salomon's corporate finance department, Wolfensohn worked with Robert Miller on the Chrysler bailout, which first placed Wolfensohn in the public eye. He opened his own firm in 1981.

MENT 'BONDING.' Wolfensohn's business strategy was simple: court a small group of CEOs. Instead of prospecting for business, depend on word of mouth. And offer clients strategic advice that is usually disinterested.

Wolfensohn now presides over a thriving firm of 100 employees, with joint-venture partners in Tokyo and London. In 1991, Wolfensohn advised on about 11 deals, including the \$4.3 billion merger of NCNB and C&S/Sovran, and acquisitions for Kmart and Daimler-Benz. He charges a retainer, ranging from \$250,000 to several million, which gives CEOs regular access to him, plus another fee if the firm advises on a specific transaction. "There's a difference between being a hired gun and giving a sense of intimacy with a client," says Wolfensohn. "A CEO has got to feel he can call you on a personal matter. There has to be some sort of bonding."

Right now, Jim Wolfensohn has a lot riding on Olympia & York. Miller is playing a key role in selling the Reichmanns' restructuring plan to bankers. Though Wolfensohn says Volcker is not involved, observers speculate that Reichmann believes having the former Fed chairman on his team might help incline skittish bankers to negotiate rather than pull the plug. With O&Y in deep trouble, having Volcker in the wings certainly can't hurt.

By Leah Nathans Spiro in New York

REAL ESTATE

IS OLYMPIA & YORK TOO BIG TO SINK?

The developer's hard-line bargaining with lenders just may pay off



GREENWALD (LEFT) AND MILLER WILL BE AFTER BANKERS TO KEEP FUNDING CANARY WHARF

Paul Reichmann is the soul of soft-spoken audacity, quietly maneuvering over the past three decades to build the largest real estate empire on earth. Now, though, most of the planet is in a commercial real estate slump, his own buildings are in bad trouble, and he's behind on debt payments. But Reichmann, whose murmuring speech makes listeners strain to hear, has lost none of the old nerve.

The chief strategist for his family-owned Olympia & York Developments Ltd. brazenly told its 91 bank creditors at an Apr. 13 meeting in Toronto that he wants not only to retain control of the empire but to keep it intact. To accomplish this, he is counting on a critical fact: O&Y is too big to fail without widespread pain to others. Banks holding the \$12 billion in real estate loans would face a horrendous crisis. If Toronto-based O&Y goes under, says a key adviser, former Chrysler Corp. executive Robert S. Miller Jr., that would be "a disaster for all concerned." Foreclosures would leave

banks holding many problem buildings, which they would have little hope of selling at a time of huge office-vacancy rates. That could destroy some banks' balance sheets.

If O&Y can hold on to all its properties, it would be a feat that no other big-time

deadbeat developer, from Donald Trump to John C. Portman Jr., has accomplished. To top that, Reichmann wants some fresh loans, including \$175 million to keep afloat its woebegone Canary Wharf project in London. And he wants a halt on debt principal and interest payments while working out a permanent loan restructuring—with the promise that lenders will eventually be made whole (table).

Can O&Y pull this off? It may come closer than many

people think. Restructuring experts predict that the Reichmanns may eventually only have to hand over about 20% of their equity to lenders. The family may also be forced to sell some of its stock in such O&Y-controlled public companies as papermaker Abitibi-Price Inc. and oil

THE REICHMANNS' SURVIVAL STRATEGY

- ▶ Stay in charge of Olympia & York and keep all of its equity
- ▶ Resist large-scale asset sales, which would fetch a pittance in today's depressed market
- ▶ Promise lenders they'll come out whole, but get them to defer interest payments and loans coming due, pending a restructuring agreement on the \$12 billion bank debt
- ▶ Get new loans of \$175 million to continue work at Canary Wharf and \$85 million to meet O&Y operating needs

DATA: ENW

producer Gulf Canada Resources Ltd. That could be it.

O&Y's hard-line opening gambit is based on the premise that its assets are only temporarily undervalued. Once they recover, Miller argues, the portfolio's net worth will be a tidy \$4.6 billion. Unfortunately, secrecy-obsessed O&Y so far is offering the banks only partial financial data to back this up. The Reichmanns want to dicker with separate sets of creditors, thus hindering someone from putting together the pieces of the Reichmanns' intricate global web of financings. But this may intensify squabbling among the banks.

The Reichmann secrecy also led to internal turmoil on the eve of the negotiations. O&Y's president of just three weeks, former Manufacturers Hanover Corp. No. 2 Thomas S. Johnson, quit after apparently losing a fight with his new boss for more disclosure. Johnson, who couldn't be reached for comment, was reportedly on board just for the O&Y debt revamp and then planned to return to banking. Playing cute with his old comrades was not in his interest.

MAJOR BREAK. Johnson's replacement has a track record in rescuing ailing behemoths. Former Chrysler Vice-Chairman Gerald Greenwald, working with Miller, now a partner at James D. Wolfensohn Inc. (page 88), brought the auto maker through federal bailout talks 12 years ago. Still, neither man is a real estate expert. Admits Miller: "I didn't know how to spell real estate" when he was hired in late March. Greenwald and Miller will be overshadowed in the talks by Paul Reichmann.

Their greatest challenge will be persuading bankers to continue funding Canary Wharf. The project needs an additional \$3 billion for completion. Stopping the \$6.5 billion complex now would be self-defeating, O&Y contends, since its recently completed first phase was only expected to break even. The massive development got a boost with the victory on Apr. 9 of Prime Minister John Major's Conservative Party, which favors extending the London subway to out-of-the-way Canary Wharf. Nevertheless, London's vicious real estate recession has left the Reichmanns' wonderland with a 40% vacancy rate.

Most bankers grudgingly admit, however, that the Reichmanns are best suited to deal with their assets. Letting a horde of bankers take over, says Paula K. Konikoff, director of real estate valuation at KPMG Peat Marwick, "would bring chaos." That fear is Paul Reichmann's best friend.

By William J. Symonds in Toronto, with Mark Maremont in London and Larry Light in New York

MARKETS & INVESTMENTS

DISCOVERING THE FABULOUS 50s

A TVA bond issue reveals investors' unexpected faith in the long view

For months, the bond market has been pounded with mortar shells. Fearful of a ballooning budget deficit and a rekindling of inflation, fixed-income investors have shunned long bonds like the plague in favor of lower-yielding short-term securities.

But what happened on Apr. 9 may have changed all that. The Tennessee Valley Authority, a quasi-governmental agency and one of the largest U.S. utilities, offered a cool \$1 billion in 50-year bonds—the largest 50-year issue in U.S. history. Rather than run, investors oversubscribed the issue two to one.

Half the issue is conventional coupon bonds priced to yield 8.52% a year—a little more than a half a percentage point above the rate on 30-year Treasuries. The other half was "stripped": Coupons maturing in the next 20 years were turned into zero-coupon bonds, with yields depending on when the bonds mature. The remaining coupons were grouped into a hybrid security, paying no interest for 20 years and making interest payments for the next 30. These hybrids, which were bought for 16¢ on the dollar, have a yield to maturity of 8.94% a year.

SCARCITY. The warm reception puzzled many investors, who took a look—and passed. William F. Malec, the TVA's chief financial officer, said even some investment banks were skeptical about the issue. But Ronald J. Ryan of Ryan Labs Inc., a Wall Street fixed-income research firm, wasn't surprised. "The objective of many institutional money managers is to meet liabilities that are 30, 40, or 50 years away," he says. "Those institutions need assets that have durations of 30, 40, and 50 years."

Long-lived assets—especially with the

AAA credit quality of the TVA—are scarce. The U.S. Treasury sells 30-year bonds. Resolution Funding Corp., the agency that helped finance the thrift bailout, issued 40-year bonds a few years back. The TVA itself sold \$2.5 billion in 40-year bonds in 1989. Pension funds and life-insurance companies once looked to real estate for long-term investments, but that has dried up, too.

Says Charles I. Clough of Merrill Lynch & Co.: "Buyers of these bonds got a pretty attractive deal."

For insurance companies and pension funds that can tuck the bonds away for 50 years, the chief risk is that, after 20 years, interest rates could fall and the TVA could call in the bonds. Gregory J. Parseghian, head of fixed-income research at First Boston Corp., thinks many buyers expect a call. "At least there's 20 years of call protection," he says. "High-quality corporate bonds only give 5 or 10."

For investors who have to "mark to

market"—price their holdings daily according to the market—these bonds could be stomach-churners. If interest rates go up one point, the value of the coupon bond declines 10.1%, and the hybrid tumbles 27% (table). But if interest rates fall by one point, the prices of the two jump up 12% and 34.6% respectively.

The TVA's success may touch off a boomlet in bonds that don't mature until the middle of the next century. "We're not opposed to 50s," says John L. Hague, a principal at Pacific Investment Management Co., which runs \$36 billion in fixed-income accounts. "It's a matter of price. If the yield had been closer to 9%, we might have bought." Who says long-term investing is dead?

By Jeffrey M. Laderman in New York

THE RISK IN THE NEW 50-YEAR BONDS

The Tennessee Valley Authority sold \$1 billion in 50-year bonds. Half the issue is a coupon bond with a yield to maturity of 8.52%. The other half includes a hybrid bond that pays no interest for 20 years and then turns into a coupon bond. The hybrid's yield to maturity is 8.94%.

Here's what happens if interest rates change sharply from today's levels

Change in interest rates	Change in bond price	
	Coupon bond	Hybrid bond
+1%	-10.1%	-27.0%
+2	-19.2	-46.7
-1	+12.0	+34.6
-2	+26.4	+78.2

DATA: FIRST BOSTON CORP



FINANCIAL WIZARDRY AND MAJOR FINDS, MOFFETT HAS HELD RETURNS ABOVE 20%

FREEPORT-MCMORAN, RARE COMMODITY

Can the mining company keep on conjuring up miracles?

James R. Moffett, chief executive of mining company Freeport-McMoRan Inc., isn't afraid to stand out in a crowd. At a recent celebration in Indonesia of the 25th anniversary of his company's operations there, with government and business leaders watching, Moffett went into an Elvis impersonation. Excess is Moffett, who often copies the look at company Christmas bashes: Elvis is a common denominator."

Bob Moffett is a standout in financial theatrics as well. He presides over a \$1.6 billion natural-resource giant based in New Orleans that has some of the richest gold, copper, and sulfur deposits in the world. The bad news: Most commodity prices have been in the doldrums for years. In response, Moffett has employed a heavy dose of fiscal wizardry that, coupled with lightning-quick moves in strategy and no small amount of good luck, has enabled Freeport-McMoRan shareholders to prosper handsomely.

GOING DEEP. Since Moffett took over in 1984, shareholders have realized compound annual returns of more than 20%, a mean feat for a resource company. Despite ups and downs, its stock has outperformed competitors (chart). Analyst John C. Tumazos of Donaldson, Lufkin & Jenrette Securities Corp. lauds Moffett's financial prowess. He says: "They've been the most creative company in natural resources."

Moffett's creativity was born of neces-

sity. After Freeport-McMoRan was formed from the merger in 1981 of Freeport Minerals and McMoRan Oil & Gas, the company found itself short of the reserves necessary for long-term survival. So Moffett, a geologist by training who is assisted by dual chief financial officers, began a \$1.5 billion acquisition spree.

With cash flow badly squeezed by low commodity prices, Moffett was forced to find novel ways to pay for deals. Believing investors were undervaluing his conglomerate, he spun off parts of some subsidiaries to the public to help raise cash. Initial public offerings of Freeport's gold company and an oil-and-gas limited partnership in 1985, for instance, brought in \$165 million. At one point, the

company had six publicly traded units.

But two spectacular discoveries in 1988, within six months of each other, posed an even bigger challenge for Freeport. A joint venture it controlled made a major sulfur find in the Gulf of Mexico—North America's largest in 25 years. And another Freeport unit discovered a huge extension of its Grasberg ore body in Indonesia, which transformed the deposit into the largest single gold reserve and one of the five largest copper reserves in the world.

EASY GO. There was only one problem: The company needed more than \$1 billion to develop these finds. So Moffett set to work jettisoning many of the assets he had worked hard to acquire—some \$2 billion worth since 1989.

That wasn't enough, though. Because of its below-investment-grade debt ratings—in the double-B range—and what it considers an undervalued stock price, Freeport decided to steer clear of straight debt or equity. Last year, the parent company and the copper-and-gold unit together issued three convertible debt offerings, raising \$700 million. Two of the three were zero-coupon bond issues, which allow Freeport to postpone paying interest, thus conserving cash to develop its new projects.

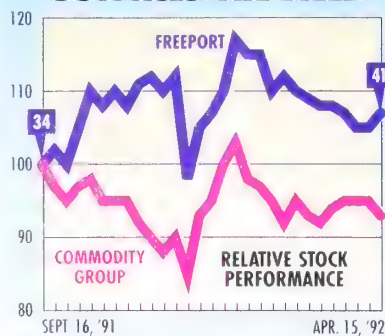
By the start of this year, Moffett decided to pare down the company's hefty debt burden, giving it future financial flexibility to take advantage of opportunities. Freeport is considering nearly doubling production at its Grasberg mine by the start of 1996, at a cost of up to \$800 million. To deleverage in the meantime, its Resource Partners unit recently raised \$426 million through a public stock offering, and the parent company generated an additional \$250 million in a private placement of convertible preferred shares. In the next few months, it aims to spin off real estate and oil-and-gas assets to shareholders. The benefit to Freeport: About \$500 million in debt will shift to the new company. Freeport's debt, net of cash, should be about \$700 million by midyear, down about 60% from yearend 1991.

Alas, the near-term earnings picture isn't so rosy. Prices for such commodities as gold, phosphate fertilizer, and natural gas are even weaker than usual. Analysts figure that Freeport's profits from current operations could drop by 26%, to \$85 million this year.

But many investors are still bullish on Freeport. "We can see them not only surviving but prospering, even if commodity prices decline significantly," says Mark W. Johnson, gold fund manager at USAA Investment Management Co. and a Freeport shareholder. After all, one Freeport commodity remains strong: Moffett's financial magic.

By Wendy Zellner in New Orleans

CANNY FREEPORT OUTPACES THE FIELD



▲ INDEX: SEPT. 16, '91=100

DATA: BRIDGE INFORMATION SYSTEMS INC.

BY GENE G. MARCIAL

THE BELLS ON THIS SLOT MAKER KEEP RINGING

Chuck Mathewson's fortunes are tied to the widening worldwide thirst for gambling revenue. Since 1986, Mathewson has steered International Game Technology to become the world's largest producer of slot machines and other gaming equipment. Earnings have been on an upswing, and IGT's stock has been hot—jumping 449% last year and some 35% so far this year, to 30.

No wonder many investors have turned jittery toward the Reno-based company. Two worries nag them: Some insiders, including Chairman and CEO Mathewson and IGT President Jack Russell, have sold shares and reaped huge profits. And these investors suspect earnings won't grow fast enough to sustain the stock's heady price-earnings ratio of 40.

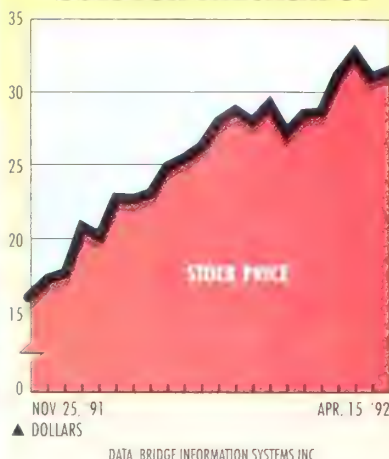
"Not to worry," says Mathewson, who has pared his IGT stake from 9% a year ago to a tad over 5%. "I do things differently. I won't ever sell stock if I know something has gone wrong or if earnings will collapse. I only sell when I'm very sure that the company will continue to do very well," he explains.

"The truth is, IGT has just begun to scratch the surface of something very big," he says. "Gaming is exploding worldwide, and the market for our products is much bigger than what everybody else estimates it to be," says Mathewson. And IGT is the only major company licensed to sell gaming equipment in all parts of the world where gaming is legal, he adds.

INTO JAPAN. IGT's next source of big growth: Japan. After three years of talks, the company has approval to submit specifications for the machines it proposes to make for that market. The IGT units will be patterned after the Japanese *Patischvro*—a cross between the popular *Pachinco* game machine and the traditional slot machine.

Some 600,000 *Patischvro* machines are currently operating in Japan, a market that can absorb more than 1 million gaming machines, says Mathewson. IGT is expected shortly to sign a marketing "alliance pact" with a major Japanese company for IGT's machines. The Japanese market will produce annual revenues of \$100 million starting next year, Mathewson estimates. Total

A GAMING COMPANY GOES FOR THE JACKPOT



IGT sales last year was \$237 million.

Several analysts are also big IGT fans. "The IGT story remains the most powerful one we know of, and we would buy the stock even at these levels," argues Morgan Stanley's Kurt Feuerman. Based on his projected earnings of \$1.15 a share for 1993 and \$1.60 in 1994, he figures the stock will rise to 46 a share this year and to 64 in 1994. "These valuations seem very achievable in light of the company's exciting growth prospects." Last year, per-share earnings jumped 53%, and in the prior three years, they shot up at a compounded yearly rate of 40%. In the two most recent quarters, net zoomed 112% and 89%, respectively.

BOEING IS ON THE RUNWAY

Boeing hasn't been getting much investor respect lately because of the recession and the woes facing the troubled airline industry. But now the major maker of commercial jets is starting to excite investors who scout for the big "fallen angels."

Take money manager Tony Hirschler, president of Brandywine Asset Management. "As a devoted value investor, I can't ignore a company like Boeing that's selling at only nine times earnings; a company that's fundamentally sound and whose prospects are certain to improve with the pickup in the economy," he says. The stock, down as low as 40 a share last year, rebounded to 54 when the market rallied in January. But a series of cancellations in aircraft orders from several besieged airlines put renewed pressure

on the stock, and it fell to 43. It is now trading at 47. Some big investors are convinced Boeing will fly to 60 when the recovery becomes more credible.

Smith Barney Harris Upham analyst Mike Rosen has put out a strong buy on Boeing. "Investors will see beyond their current concerns and pay a fair price for Boeing's stock," once the airlines' revenue-per-passenger starts perking up, he says. Airline spending is stabilizing, and he expects new orders to increase, primarily for Boeing's 777 widebodies. Already, Cathay Pacific Airways has ordered 11 of the 777 jets. Boeing should be able to maintain its production schedule, says Rosen. He sees earnings of \$5.50 a share in 1993 and \$5 this year, vs. \$4.56 in 1991.

One major investor believes that Boeing's first-quarter earnings will exceed expectations and that 1992 profits will also be an "upside surprise."

RECESSION BEATERS IN THE NEWS?

While the Street is going gaga over shares of highly cyclical companies—auto, paper, and chemical—investment manager George Jacobsen is staunchly avoiding them. He thinks the recovery will stay lackluster. The companies to be in, he says, are those whose earnings will be robust in spite of a hesitant recovery.

Jacobsen, who heads equity investing at Trevor Stewart Burton & Jacobsen, a New York investment firm, sees newspaper publishing stocks as standouts in a group he believes will do well in a sluggish recovery. "We regard them as truly growth companies."

Two of his picks: Knight-Ridder, which has distinguished itself in the industry by tight cost control, and Lee Enterprises. Lee's strength, according to Jacobsen, is its dominance in small markets in the Midwest and West, where it owns 19 daily and 32 weekly newspapers and 7 TV stations.

Knight-Ridder, publisher of *The Miami Herald* and *Philadelphia Inquirer*, has demonstrated pricing power, Jacobsen says, by hiking newsstand prices without losing much circulation. He also likes its electronic news and business-information services. The stock hit a high of 61 on Apr. 15, and he sees 90 to 100 within three years.

Lee, which publishes the *Wisconsin State Journal*, serves smaller markets, but they have been "dependable," says Jacobsen. He thinks that Lee, now at 26, will be at 50 in three years.

No Sales
Charge

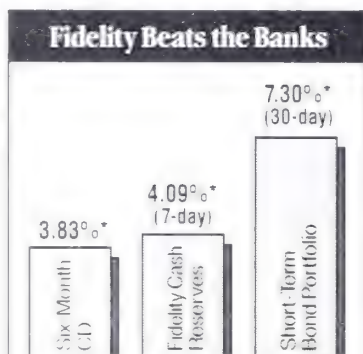
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HUGH McCOLL'S MASTERWORK

So far, NationsBank is a model merger

When NCNB Corp. announced plans last July to acquire C&S/Sovran Corp. for \$4.6 billion in stock, skeptics wondered if Hugh L. McColl Jr. had finally overstepped his outsized ambitions. After all, the merger wasn't only the biggest deal NCNB's predatory chief executive had ever undertaken, it was one of the biggest mergers in U.S. banking history.

But nine months later and barely three months after the merger was made final, it appears that McColl's nearly seamless melding of the two Southeastern superregional banks may become a model for other banking combinations in the 1990s. NCNB-C&S/Sovran, now renamed NationsBank Corp., is the nation's fourth-largest bank. With \$11 billion in assets, the Charlotte (N.C.) bank is even bigger than money-center giants such as Chase Manhattan Corp. and First Chicago Corp.

While there have been a number of snafus, McColl has avoided many of the mishaps that have dogged other 1990 megabank deals. Chemical Banking Corp. is still three months away from merging its banking unit with that of Manufacturers Hanover Corp., but the 56-year-old McColl is close to fashioning a unified nine-state branch system. It's an awesome network, 1,800-strong, stretching from Maryland to Texas. One reason for the success is that McColl didn't have to face the agony of Chemical and Manny Hanny in integrating two banks serving the same market. Instead, he joined banks in adjacent markets.

ONE BOSS. McColl has also managed to sidestep the popular backlash that erupted when BankAmerica Corp. announced its acquisition of Security Pacific Corp. last August. BofA gained Federal Reserve approval for its deal in March only after the bank agreed to divest itself of more than 200 branches in Western states while also pledging \$12 billion in loans to low-income areas.

In contrast, because there was little overlap, NationsBank didn't end up with an overwhelming market share in any one state, so regulators and many community groups saw little reason to squawk. What's more, the bank, much like Bank of America, blunted opposition by pledging \$10 billion in loans for low-income neighborhoods. Even McColl, not one to be easily flustered, admits to some surprise. "It's gone remarkably well," he says.

Just how well may become apparent on Apr. 20, when NationsBank announces its first-quarter earnings. Thanks in part to cost savings already kicking in, the company says it is comfortable with analysts' forecast for a

ty 51% increase, to \$240 million. As the \$1 billion in earnings that Wall Street expects for all of 1992, McColl's the fivefold increase from 1991's stated profits "seems obtainable."

Perhaps the major lesson of the NationsBank deal is that it's a lot easier to merge when one partner is in charge. While the Chemical-Manny Hanny merger has been slowed by haggling and compromising, McColl has been able to move swiftly because he's running the show. "This was not a merger of equals," says James W. Thompson, chairman of NationsBank East and a former vice-chairman at NCNB. "People on both sides knew that from the start." NCNB was clearly the healthier partner. McColl and his senior management had more experience with mergers than their counterparts at C&S/Sovran, led by CEO Bennett A. Brown. In addition, the dismal record of Brown and President Dennis C. Bottorff in merging C&S and Sovran the previous year didn't help matters. Their go-slow, consensus-build-consolidation plan ground to a halt when senior executives were forced to deal with an explosion of problem real estate loans at Sovran banks in the Washington (D.C.) area. That weakened C&S/Sovran's balance sheet, drove down its stock price, and made it vulnerable to takeover.

McColl's primacy was confirmed last October, when NCNB executives were reduced to six of eight senior positions at the bank. Although Brown retains the title of chairman at NationsBank, his responsibilities are limited. Bottorff left, and several other top C&S executives. Unchallenged control has made it relatively easy for McColl to cut costs. The day after the merger announcement, he assembled a transition team that eventually included almost 1,000 staffers. They identified 500 major business areas that could be affected by the merger. Then, they went about consolidating operations, such as credit-card processing and mortgage servicing. All told, about 9,000 jobs are to be eliminated by 1994 from the premerger total of nearly 60,000 employees. More than 3,000 of those jobs already are gone, mostly through attrition. McColl has upped the estimated annual cost savings to \$450 million by 1994 from the \$350 million he forecast last summer.

HURRIED WORKERS. For all this, the NCNB-C&S/Sovran merger hasn't exactly been a snap. The cutbacks understandably hurt morale. "Everyone worries: Will I have a job?" says Executive Vice-President Rusty Rainey. McColl imposed a hiring freeze on the day of the merger announcement, figuring that at-

trition would result in most of the needed job cuts. Even so, Rainey says perhaps as much as 20% of the work-force reduction must come from layoffs.

More worrisome is NationsBank's \$2.8 billion in bad loans, most of which were inherited from C&S/Sovran. Last year, the bank set aside \$1.6 billion for loan-loss provisions. But McColl also would still prefer to get rid of many of

Looking ahead, McColl's first challenge is to crank up lending. He has acquired a number of failed banks and thrifts to fill out his branch network. But in doing so, he has also picked up an embarrassment of liquidity. Low-cost customer deposits exceed loans outstanding by an astounding \$20 billion. The bank has been making a profit by investing those funds in safe government-backed securities, but there's a much bigger payoff to be made by booking higher-margin loans.

RETAIL PUSH. Even though there has been a modest upturn in corporate loan demand in recent weeks, McColl is emphasizing retail lending. He says that consumers are not only better credit risks, but margins on retail loans are much fatter. By 1995, McColl says, consumer loans should account for half of NationsBank's loan portfolio, vs. the current 38%. "That's a lot of car loans, college loans, mortgages, and home-equity loans," says Kenneth D. Lewis, the 44-year-old executive in charge of the retail push who is widely perceived as heir apparent to McColl. The plan also may include sizable acquisitions of credit-card portfolios, says Lewis. NationsBank is currently the eighth-largest credit-card issuer in the country, with 4 million accounts.

McColl is eager to expand the number of products NationsBank is offering. Already at the forefront of those demanding that Congress lift the ban on interstate banking, a move that could eliminate layers of local management and save the bank another \$50 million a year, McColl also wants expanded securities powers. The hope is that NationsBank will one day be able to sell mutual funds and annuities directly to its 7 million customers.

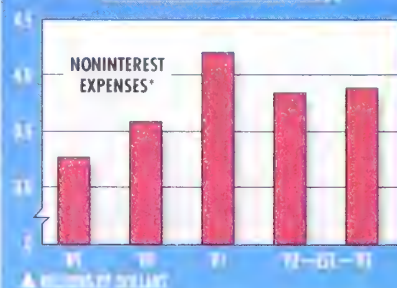
As for other deals, McColl insists he is too preoccupied with his current merger work to chase after new quarry. But he remains determined to build a bank worthy of its name. He even talks about expanding into Canada and Mexico.

Although NationsBank's capital base is solid, analysts say McColl will have to boost its stock price before considering another big deal. Stock swaps are the preferred method for bank mergers. So far, NationsBank's stock has risen 14% this year, to more than 46. Analysts estimate that NationsBank would have to trade a good deal higher than that to avoid excessive dilution for shareholders—a tall order. But then, NationsBank's feisty CEO seems to have a habit of confounding the skeptics.

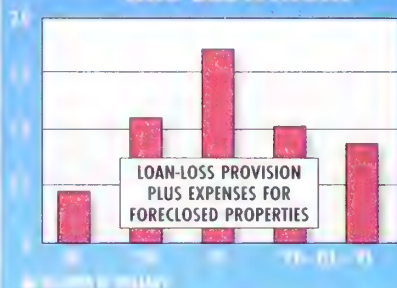
By Chuck Hawkins in Atlanta, with Suzanne Woolley in New York and Janet Fie in Washington

ON THE UPSWING

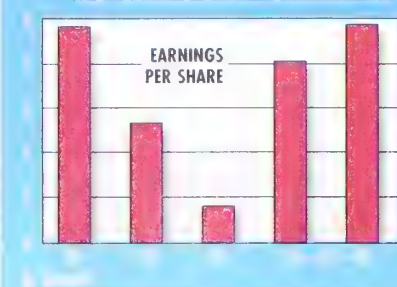
OVERHEAD REMAINS HIGH...



...BUT BAD LOAN COSTS ARE SLOWING...



...AND PROFITS ARE LIKELY TO REBOUND SHARPLY



NationsBank's worst credit risks. AMRESKO, a workout unit created by NCNB in 1988 to deal with troubled loans at its Texas bank, is offering pools of bad loans for sale at a discount. One such pool includes \$500 million worth of commercial real estate loans. Executives expect it to fetch from 62¢ to 65¢ on the dollar.

A YEAR OF SHAKING OFF THE BAD-LOAN BLUES

Having retrenched in 1991, America's banks should see earnings accelerate



1991 return on equity

MBNA	28.5%
BANKERS TRUST NEW YORK	23.1
J. P. MORGAN	19.6
NORTHERN TRUST	19.0
NORWEST	18.5
STATE STREET BOSTON	18.0
CENTRAL BANCSHARES OF THE SOUTH	17.5
FIRST HAWAIIAN	17.4
BANKAMERICA	17.1
FIFTH THIRD BANCORP	16.6
100-BANK AVERAGE	5.8

Average five-year growth in earnings per share

FIRST COMMERCE	64.9%
INDUSTRIAL BANK OF JAPAN TRUST	53.5
FIRST SECURITY	36.8
MANUFACTURERS NATIONAL	36.0
J. P. MORGAN	23.4
SUMITOMO BANK OF CALIFORNIA	20.1
WEST ONE BANCORP	19.3
FIRST HAWAIIAN	19.0
BANKAMERICA	18.2
U. S. BANCORP	17.7
100-BANK AVERAGE	-13.7

1991 nonperforming assets as percent of assets

UNITED MISSOURI BANCSHARES	0.2%
ISRAEL DISCOUNT BANK	0.3
STATE STREET BOSTON	0.4
BANCORP HAWAII	0.4
FIRST CITIZENS BANCSHARES	0.5
COMMERCE BANCSHARES	0.6
FIRST VIRGINIA BANKS	0.6
FIRST ALABAMA BANCSHARES	0.6
REPUBLIC NEW YORK	0.6
FIRST HAWAIIAN	0.6
100-BANK AVERAGE	3.3

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC.

Alfred Lerner likens his job to having "one foot in the fire and the other in the refrigerator." It's an apt description. While serving as both chairman of MNC Financial Inc. and chief executive of MBNA Corp., a bank specializing in credit-card loans spun off by MNC in January, 1991, Lerner has experienced firsthand the extremes of triumph and disappointment.

MNC, a Baltimore bank-holding company, reported a \$70.2 million loss for 1991. Buried under a passel of bad real estate loans, it classified 10.2% of its assets as nonperforming. That was the highest ratio of bad loans reported by any of the 100 banks that are ranked by asset size in BUSINESS WEEK's annual Bank Scoreboard (page 98).

By contrast, MBNA, in Newark, Del., reported a 16% gain in profits, to \$149.2 million, making it the most profitable among the biggest banks last year. MBNA's return on equity was a bountiful 28.5%. Even though card rates have been under pressure, Lerner notes that MBNA's cost of funds has declined at the

same pace as the interest charged to consumers. "The profit in this business is the spread," he says.

As the Scoreboard's data make clear, MBNA was a fluke, however. MNC was much more typical of the way things were for banks in 1991. It was, in short, another dismal year: Net earnings for all 100 banks fell 8%, to \$8.5 billion. In 1990, profits were up 10%. And the overall rate of return on equity for banks slid to 5.8% from 1990's 6.5%.

As in MNC's case, bad loans continued to dog bankers last year. The recession exacerbated commercial real estate troubles. And consumer-loan delinquencies climbed along with unemployment. In all, banks charged off 1.9% of their loans last year, vs. 1.5% in 1990. By the end of 1991, banks had reserved \$27 billion to cover future losses. Adding to loan-portfolio headaches was the dearth of new business. Outstanding loans fell 3%, to \$1.5 trillion—the first contraction in total loans ever recorded by BW since the Scoreboard was first published in 1973.

Banks in the Northeast were again

hardest hit by loan problems. More than 6% of Citicorp's assets were nonperforming at the end of 1991. In addition, the nation's largest bank increased its loan loss provision by a hefty 46%, to \$3.9 billion. In California, the sagging economy battered banks as well. Wells Fargo & Co. more than tripled its bad-loan reserves, to \$1.3 billion. At the end of 1991, nonperformers accounted for 4.5% of the San Francisco bank's \$54 billion in assets, vs. 2.5% the previous year.

HEARTY HEARTLAND. Of course, not every bank was preoccupied with sour loans. The Midwest again was spared many of the real estate woes afflicting the two coasts. Consider Kansas City's United Missouri Bancshares Inc.: Only 0.2% of its assets were nonperforming last year, making it the safest bank in the top 100.

In addition to a more stable economy, strict lending standards helped keep United Missouri's portfolio clean. The bank declines to participate in loans syndicated by other banks. And it won't lend more than \$25 million to any one

power. "We've had a longstanding commitment to quality assets, long before everyone was talking about it," says United Missouri President Malcolm Aslin.

Hawaii turned out to be another safe environment for banks in 1991. Honolulu's First Hawaiian Inc. also ended up among the strongest banks in this year's rebound, thanks to conservative lending policies. Only 0.6% of the bank's assets were nonperforming last year. The bank benefited from the state's resilient economy as well. Indeed, in addition to being one of the 10 safest banks, First Hawaiian also shows up among the ranks of the most profitable banks and the steadiest earners.

In 1992, banks will likely have a better year. At least that's what the stock market thinks. From Dec. 31, 1991, to Mar. 31, 1992, total market capitalization for the top 100 rose by a staggering 51%, to \$1.7 billion. During the same period of the year, the total value of bank shares rose 5%.

Analysts are somewhat less ebullient. They see a big turnaround any time soon. While the condition of California

In the first quarter, MBNA added 450,000 cardholders, despite charging them an average annual rate of 17.9%

banks remains problematic, analysts feel most banks have put the worst of the loan woes behind them. And further consolidation will continue to reduce expenses. In the meantime, lower interest rates are helping the bottom line by decreasing banks' cost of money. Once the economic recovery kicks in, earnings momentum could accelerate.

SIGNS OF SPRING. The trickle of first-quarter results already indicates an improvement. On Apr. 13, National City Corp. announced a 34% gain in first-quarter profits, to \$69 million. The Cleveland bank largely credited improved asset quality for the strong earnings advance. Bank analysts at Fox-Pitt Kelton Inc. predict that 87 out of the 114 banks they track will post higher profits

in the first quarter. The median gain will be 8.3%. For all of 1992, the rise is estimated to be 12.5%.

MBNA's Lerner, for one, is counting on another solid year. Unlike other banks that have seen their card businesses suffer as consumers reduced spending, MBNA has managed to add new accounts through its expanding affinity programs. The bank currently issues cards through some 2,000 organizations, such as college alumni associations. In the first quarter alone, the bank added 450,000 cardholders, swelling its customer base to almost 8 million.

And although the Federal Reserve Board has lowered the discount rate to 3.5%, MBNA still charges card users an average annual rate of 17.9%. Goldman, Sachs & Co. analyst Robert G. Hottensen expects MBNA earnings to climb 17% this year, to \$3.50 a share. MBNA, says Lerner, "tends to do better and better and better." In the year ahead, Lerner's fellow bankers have their fingers crossed that they will be able to make a similar boast.

By John Meehan in New York, with Joe Weber in Philadelphia and bureau reports

WHAT THE COLUMN HEADINGS MEAN

Market value

Using share price of a bank's common stock as of Mar. 27, 1992, multiplied by the corporation's latest available number of common shares outstanding

Assets

Total assets as of Dec. 31, 1991

Deposits

Total deposits as of Dec. 31, 1991. Interest-bearing deposits and noninterest-bearing deposits together will total 100%. Foreign deposits subtracted from 100% will equal domestic deposits

Loans

Aggregate face value of all outstanding loans and leases as of Dec. 31, 1991, net of unearned income and before deduction of valuation portion and loan-loss reserves

Provision for loan loss

Charge for anticipated loan losses, which appears on the income statement as an operating expense

Net income

Net income after minority interests and taxes

Net charge-offs as percent of loans

Loan charge-offs less recoveries as percent of net average loans outstanding. A minus sign indicates that recoveries exceed charge-offs

CRE

Commercial real estate loans as a percent of total loans outstanding

HLT

Highly leveraged transactions as a percent of total loans outstanding

NPA

Nonperforming assets, including real estate owned, as a percent of total assets

Operating income

Operating income after minority interests and taxes but before preferred dividends, and gains and losses from the sale of securities

Return on assets

Net income available for common shareholders (net income minus preferred dividends) divided by average assets

Leverage

Average assets divided by average common equity computed on a daily average basis for the year ended Dec. 31, 1991

Return on equity

Net income available for common shareholders divided by average common equity for the year ended Dec. 31, 1991. Return on average assets multiplied by leverage equals return on average common equity

Net interest income

Total interest income adjusted for tax equivalents minus total interest expense before provision for loan losses

Growth in earnings per share

Annual trend in the growth rate of primary earnings per share for the restated five-year period ended Dec. 31, 1991

Dividend yield

Annual dividend as a percent of Mar. 27, 1992, stock price

ALPHABETICAL LIST OF BANKS

Number following each bank's name is its asset ranking in the tables beginning on the next page

First 55	Boatmen's Bancshares 35	Dominion Bankshares 58	First Hawaiian 79	INB Financial 78	Mercantile Bankshares 93	Norwest 17	Star Banc 77
First Bancorp. 60	Central Bancshares 82	European American 97	First Interstate Bancorp 11	Industrial Bank Of Japan 92	Merchants National 86	Old Kent Financial 65	State Street Boston 41
First 12	Central Fidelity 74	Fifth Third Bancorp 66	First Maryland Bancorp 63	Integra Financial 64	Meridian Bancorp 51	PNC Financial 15	Sumitomo Bank Of Calif. 91
First Hawaii 50	Chase Manhattan 6	First Alabama Banc 76	First Of America Bank 39	Israel Discount Bank 100	Michigan National 54	Puget Sound Bancorp 96	SunTrust Banks 18
First Boston 21	Chemical Banking 2	First America 80	First Security 73	KeyCorp 28	Midlantic 34	Republic New York 22	U. S. Bancorp 32
First New York 16	Citicorp 1	First Bank System 33	First Tennessee National 70	LaSalle National 68	MNC Financial 37	Riggs National 88	UJB Financial 45
First Tokyo 61	City National 99	First Chicago 10	First Union 13	Manufacturers National 44	Morgan (J. P.) 5	Sanwa Bank 72	Union Bank 36
First America 3	Comerica 43	First Citizens Banc 89	First Virginia Banks 83	Marine Midland Banks 38	National City 26	Security Pacific 7	United Missouri Banc. 98
First Trust 8	Commerce Bancshares 75	First City Texas 57	Firststar 48	Marshall & Ilsley 71	National Westminster 31	Shawmut National 29	Valley National 53
First 67	Continental Bank 27	First Commerce 95	Fleet/Norstar 14	MBNA 84	NationsBank 4	Signet Banking 52	Wachovia 19
First 20	CoreStates Financial 30	First Empire State 62	Harris Bancorp 42	Mellon Bank 25	NBD Bancorp 24	Society 40	Wells Fargo 9
First 59	Crestar Financial 49	First Fidelity Bancorp 23	Hibernia 85	Mercantile Bancorp 69	Northern Trust 46	SouthTrust 56	West One Bancorp 90
First 81	Deposit Guaranty 94	First Florida Banks 87	Huntington Bancshares 47				

BANKS C

	ASSETS		DEPOSITS			LOANS						
	12/31/91 \$ MIL.	12/31/91 \$ MIL.	CHG. FROM 1990 %	INTEREST/ NONINT. %	FOR- EIGN %	12/31/91 \$ MIL.	CHG. FROM 1990 %	LOAN- LOSS PROV. 1991 \$ MIL.	CHG. FROM 1990 %	NET CHARGE- OFFS AS % OF LOANS	CRE %	
1 CITICORP	216922	146475	3	88/12	58	150944	-3	3890.0	46	3.2	7.5	
2 CHEMICAL BANKING (e)	138930	92950	4	81/19	25	84237	-2	1345.0	16	2.7	10.4	
3 BANKAMERICA	115509	94067	2	80/20	16	86368	1	805.0	-11	1.3	10.5	
4 NATIONSBANK (f)	110319	88075	-1	82/18	2	69108	-3	1582.4	54	1.9	14.7	
5 J. P. MORGAN	103468	36976	-2	88/12	82	27797	1	40.0	-20	1.7	NA	
6 CHASE MANHATTAN	98197	71517	1	79/21	36	67785	-9	1085.0	-17	2.8	12.7	
7 SECURITY PACIFIC	76411	54228	-7	76/24	7	58620	-12	2617.9	125	2.4	19.0	
8 BANKERS TRUST NEW YORK	63959	22834	-20	82/18	60	17047	-21	238.0	23	2.6	9.0	
9 WELLS FARGO	53547	43719	2	81/19	1	44099	-10	1335.0	331	1.2c	29.0	
10 FIRST CHICAGO	48963	32091	-1	75/25	29	25661	-7	440.0	-11	2.1	14.3	
11 FIRST INTERSTATE BANCORP	48922	41433	-4	70/30	1	28182	-15	810.2	62	1.9	18.7	
12 BANC ONE	46293	37057	66	82/18	2	30197	48	424.4	41	1.6	10.3	
13 FIRST UNION	46085	36598	32	82/18	8	32079	22	481.6	171	1.3	20.1	
14 FLEET/NORSTAR FINANCIAL GROUP	45445	35245	52	80/20	2	26761	31	508.6	-33	1.7	20.0	
15 PNC FINANCIAL	44892	30019	-6	83/17	2	25443	-8	428.0	-44	1.5	11.1	
16 BANK OF NEW YORK	39426	28974	-15	78/22	35	27996	-15	746.3	76	2.6	6.6	
17 NORWEST	38502	25439	0	78/22	1	19835	-5	322.2	-24	1.4	16.0	
18 SUNTRUST BANKS	34554	27988	4	79/21	1	21581	-2	206.2	5	0.9	23.6	
19 WACHOVIA	33158	23006	-1	79/21	2	20618	-3	293.0	105	1.0	18.0	
20 BARNETT BANKS	32721	28855	0	87/13	0	23488	-3	352.1	-6	1.4	18.6	
21 BANK OF BOSTON	32700	24738	-7	84/16	19	21430	-2	328.0	-47	1.6	15.1	
22 REPUBLIC NEW YORK	31221	20383	2	95/5	51	8569	-5	62.0	55	0.7	25.9	
23 FIRST FIDELITY BANCORPORATION	30215	25219	9	82/18	1	17342	-6	298.0	-40	1.7	19.7	
24 NBD BANCORP	29513	22193	-1	82/18	7	17721	4	95.8	36	0.5	17.2	
25 MELLON BANK	29355	22454	-1	80/20	4	19103	2	250.0	-21	1.3	10.4	
26 NATIONAL CITY	24170	18325	0	81/19	2	15517	-3	190.9	14	1.0	15.5	
27 CONTINENTAL BANK	24008	15735	-2	84/16	29	13874	-10	340.0	188	1.6	7.3	
28 KEYCORP	23156	19052	19	85/15	0	15084	19	152.2	110	1.1	20.3	
29 SHAWMUT NATIONAL	22816	16513	-16	74/26	1	14301	-7	466.4	7	3.1	27.6	
30 CORESTATES FINANCIAL	21624	16041	-3	68/32	5	15028	-11	188.0	-41	1.4	17.1	
31 NATIONAL WESTMINSTER BANCORP	21459	16897	-7	81/19	11	14139	-12	567.7	-5	2.8	13.3	
32 U. S. BANCORP	18875	13316	0	80/20	0	13908	-1	125.4	21	0.7	15.1	
33 FIRST BANK SYSTEM	18301	14479	-1	72/28	0	13152	-2	152.7	15	1.4	9.8	
34 MIDLANTIC	18170	16090	-20	81/19	0	12486	-26	640.4	-8	3.2	35.6	
35 BOATMEN'S BANCSHARES	17635	13477	-1	79/21	0	9695	6	88.5	28	0.8	19.6	
36 UNION BANK	17474	13160	10	68/32	5	13190	3	200.0	82	0.9	18.9	
37 MNC FINANCIAL	17438	13893	-34	86/14	3	10355	-37	428.1	-56	3.8	33.8	
38 MARINE MIDLAND BANKS	16947	13580	-14	78/22	1	11138	-28	230.0	-59	3.7	14.0	
39 FIRST OF AMERICA BANK	16755	15021	20	86/14	0	11326	19	45.6	55	0.4	19.6	
40 SOCIETY	15405	11535	-5	83/17	1	9585	-5	79.8	-16	1.0	18.3	
41 STATE STREET BOSTON	15046	8731	14	59/41	31	1905	-9	60.0	31	2.2	6.7	
42 HARRIS BANCORP	14481	9459	2	70/30	19	7907	0	79.3	36	1.1	7.8	
43 COMERICA	14451	11441	2	82/18	0	9213	6	57.9	-4	0.6	17.1	
44 MANUFACTURERS NATIONAL	13544	8854	2	81/19	14	7696	4	45.2	18	0.5	12.8	
45 UJB FINANCIAL	13378	11314	6	81/19	0	8769	1	167.4	-32	1.6	26.6	
46 NORTHERN TRUST	13193	8560	6	79/21	15	6280	13	31.0	121	0.6	7.6	
47 HUNTINGTON BANCSHARES	12333	9511	4	84/16	1	7682	0	56.7	-20	0.6	16.5	
48 FIRSTAR	12309	10063	4	76/24	1	7545	3	50.3	2	0.5	21.4	
49 CRESTAR FINANCIAL	11828	8890	5	80/20	0	7066	-8	209.5	60	2.1	22.5	
50 BANCORP HAWAII	11409	8666	-1	85/15	9	6633	4	29.6	6	0.2	18.9	

(a) Yearend amounts. (b) Data are for banking operations only. (c) Loans are net of unearned income only. (d) Income not adjusted for securities gains and losses. (e) Chemical Banking and Manufacturing merged 12/31/91. (f) C&S/Sovran and NCNB merged 12/31/91, forming NationsBank.

E B O A R D

PERFORMANCE

MARKET VALUE

OPER. INCOME 1991 \$ MIL.	NET INCOME 1991 \$ MIL.	CHG. FROM 1990 %	RETURN ON ASSETS 1991 %	LEVER. AGE 1991	RETURN ON EQUITY 1991 %	NET INTEREST INCOME 1991 \$ MIL.	CHG. FROM 1990 %	NET INCOME AS % OF NET INT. INCOME	5-YEAR AVER. GROWTH EPS %	DIVIDEND YIELD	3/28/92 \$ MIL.	CHG. FROM 1991 %	RANK
-914.0d	-914.0	NM	-0.50	27.2	-13.5	7300	1	-12.5	NM	0.00	6016	22	6
60.0	154.0	-65	0.01	23.4	0.3	4160	14	3.7	-54.4	3.66	8360	171	5
1104.0	1124.0	28	0.93	18.3	17.1	4481	8	25.1	18.2	2.95	9713	26	3
201.9d	201.9	-66	0.15	18.3	2.7	3941	5	5.1	-25.0	3.25	10988	47	1
1149.0	1114.0	44	1.00	19.5a	19.6a	1657	23	67.2	23.4	3.77	10898	26	2
517.0	520.0	NM	0.42	25.2	10.5	3405	4	15.3	NA	5.03	3339	64	17
-768.4	-774.5	NM	-1.00	20.5	-20.4	2777	-10	-27.9	NM	0.00	4948	61	10
667.0d	667.0	0	1.03	22.4	23.1	769	-9	86.7	4.7	5.09	4533	31	12
27.0	21.0	-97	0.00	17.9	0.1	2540	9	0.8	-33.4	2.86	3634	-4	14
116.3d	116.3	-53	0.15	21.7	3.2	1118	-10	10.4	-21.7	4.16	2038	40	31
-314.3	-288.1	NM	-0.67	20.9	-14.0	2118	-10	-13.6	NM	3.29	2268	9	25
529.3	529.5	25	1.52	10.9	16.6	1838	40	28.8	14.2	2.50	8469	49	4
245.0	318.7	5	0.69	17.3	11.8	1582	13	20.1	-0.6	3.47	4328	79	13
-12.7	97.7	NM	0.22	18.7	4.0	1450	16	6.7	-18.7	2.92	3406	90	16
343.6	389.8	450	0.91	15.5	14.1	1494	3	26.1	-12.5	4.27	5317	68	7
68.9	122.0	-60	0.21	17.1	3.6	1273	-9	9.6	-22.8	3.65	2762	36	19
384.6	398.5	260	1.05	17.6	18.5	1665	18	23.9	14.6	2.75	5025	93	8
369.4	370.7	6	1.13	13.5	15.2	1428	6	26.0	9.3	2.79	4634	35	11
222.4	229.5	-34	0.72	13.0	9.3	1264	8	18.2	1.6	3.42	5002	40	9
116.4	123.8	85	0.35	19.5	6.9	1363	7	9.1	-15.0	4.13	2216	52	26
-52.2	-34.4	NM	-0.15	23.3	-3.5	923	-10	-3.7	NM	0.00	1345	111	40
224.5	227.4	13	0.66	21.6	14.2	613	23	37.1	7.8	2.45	2127	10	29
185.9	221.2	NM	0.71	20.2	14.3	1104	4	20.0	8.5	3.42	2488	67	22
288.6	293.0	1	1.03	13.9	14.3	1084	6	27.0	11.2	3.48	3497	21	15
206.0	280.0	61	0.81	19.6	15.8	1001	11	28.0	-9.2	3.59	1963	70	33
214.2	231.0	-1	0.93	14.2	13.2	975	3	23.7	7.8	4.60	2543	23	21
-80.0	-73.0	NM	-0.44	20.3	-9.0	494	-3	-14.8	NM	3.58	907	45	50
180.4	188.1	27	0.81	18.1	14.7	924	32	20.3	13.1	3.48	2170	67	27
-222.2	-170.6	NM	-0.77	21.2	-16.4	760	-5	-22.5	NM	0.00	1143	153	42
240.5	228.1	100	1.04	15.1	15.6	1081	2	21.1	2.5	4.48	2443	24	23
-404.4	-371.5	NM	-1.71	13.1	-22.3	729	-6	-50.9	NA	8.37	NM*	NM	99
191.1	196.4	3	1.06	13.8	14.7	816	11	24.1	17.7	3.51	2136	28	28
190.3	190.4	46	0.95	16.1	15.3	741	9	25.7	9.0	3.09	2107	55	30
-541.4	-543.3	NM	-2.51	22.2	-55.6	660	-24	-82.3	NM	0.00	290	5	83
147.7	150.1	11	0.92	12.9	11.9	596	15	25.2	8.3	4.88	1662	21	36
91.2	93.5	-36	0.51	18.2	9.3	771	4	12.1	5.0	5.96	711	-7	68
-39.2	-70.2	NM	-0.40	17.8	-7.2	501	-43	-14.0	NM	0.00	688	76	71
-173.5	-189.9	NM	-1.10	19.0	-20.8	686	-21	-27.7	NA	NA	NM*	NM	98
132.4	134.9	2	0.85	16.3	13.8	632	10	21.4	8.3	4.18	1099	29	45
158.3	163.0	3	1.09	14.0	15.4	708	9	23.0	-2.2	3.58	3197	145	18
137.3	139.3	19	1.20	15.0	18.0	292	0	47.6	13.3	1.31	2345	41	24
102.1	104.1	30	0.80	16.0	12.7	466	10	22.4	10.4	NA	NM*	NM	95
153.4d	153.4	12	1.10	14.5	15.9	615	12	24.9	16.8	3.38	1722	90	35
119.9	120.2	11	1.02	15.0	15.3	447	12	26.9	36.0	2.98	1377	61	39
13.3	22.4	NM	0.15	16.8	2.6	514	0	4.4	-24.7	3.27	832	66	55
125.2	127.4	10	1.00	19.1	19.0	318	11	40.1	14.4	1.89	1725	36	34
122.9	117.0	37	1.00	14.2	14.3	492	11	23.8	8.5	3.58	1399	47	38
133.4	134.3	14	1.12	14.1	15.9	516	11	26.0	11.5	2.89	1559	114	37
18.3	33.8	-45	0.27	15.4	4.2	443	0	7.6	-13.4	3.56	709	35	69
110.8d	112.7	18	1.04	15.9	16.5	412	16	27.3	15.7	2.55	1297	31	41

† available. NM = not meaningful. NR = not reported. *Due to management structure.

DATA: STANDARD & POOR'S COMPUSTAT SERVICES INC., KEEFE, BRUYETTE & WOODS INC.

BANKS C

		ASSETS		DEPOSITS			LOANS					
		12/31/91 \$ MIL	12/31/91 \$ MIL	CHG. FROM 1990 %	INTEREST/ NONINT. %	FOR- EIGN %	12/31/91 \$ MIL	CHG FROM 1990 %	LOAN- LOSS PROV 1991 \$ MIL	CHG FROM 1990 %	NET CHARGE- OFFS AS % OF LOANS	CRE %
51	MERIDIAN BANCORP	11337	9453	2	86/14	0	7403	-11	99.0	-27	1.1	23.7
52	SIGNET BANKING	11239	8481	2	84/16	0	5884	-9	287.5	57	2.1	26.2
53	VALLEY NATIONAL	10652	9626	0	81/19	0	6424	-2	73.8	-17	2.0	13.9
54	MICHIGAN NATIONAL	10650	8655	-4	84/16	0	6588	-3	86.5	18	1.1	24.2
55	AMERITRUST	10181	8480	-9	83/17	2	7582	-8	200.2	-38	1.5	18.1
56	SOUTHTRUST	10158	8277	15	87/13	2	5965	8	38.0	-15	0.6	32.2
57	FIRST CITY BANCORP. OF TEXAS	9943	8797	-14	82/18	0	5446	-32	265.6	-10	5.5	21.9
58	DOMINION BANKSHARES	9711	7871	-2	86/14	0	6138	-11	142.6	-39	2.8	17.8
59	BAYBANKS	9516	8756	-2	80/20	0	6353	-11	165.4	-43	2.6	19.1
60	AMSOUTH BANCORPORATION	9459	7373	4	84/16	0	5562	-1	41.5	34	0.7	17.7
61	BANK OF TOKYO TRUST	9235	5715	21	84/16	72	4647	11	101.5	126	1.1	16.5
62	FIRST EMPIRE STATE	9171	7474	21	91/9	3	6047	13	63.4	131	0.8	NA
63	FIRST MARYLAND BANCORP	8946	6987	17	78/22	1	5631	13	68.5	-30	1.1	22.4
64	INTEGRA FINANCIAL	8847	7223	8	88/12	0	4189	-1	35.2	-55	1.0	12.0
65	OLD KENT FINANCIAL	8826	7314	5	87/13	1	5111	-4	39.8	24	0.5	27.4
66	FIFTH THIRD BANCORP	8826	6687	5	83/17	0	5807	6	55.7	40	0.9	12.3
67	BANPONCE	8780	7207	-3	79/21	0	5196	-3	121.7	129	2.2	6.3
68	LASALLE NATIONAL	8652	6399	12	NA/NA	3	4784	1	46.6	106	0.7	20.5
69	MERCANTILE BANCORPORATION	8089	6481	5	82/18	0	5390	0	49.5	9	1.1	20.6
70	FIRST TENNESSEE NATIONAL	7904	6041	13	77/23	0	3936	3	53.6	-16	1.5	7.9
71	MARSHALL & ILSLEY	7628	6133	3	76/24	0	4774	0	20.6	-48	0.3	18.7
72	SANWA BANK	7474	5375	3	79/21	18	4892	4	43.0	-7	0.6	29.1
73	FIRST SECURITY	7015	5334	7	82/18	0	4738	4	45.3	-7	0.9	15.6
74	CENTRAL FIDELITY BANKS	6806	5178	14	87/13	0	3619	1	49.8	11	1.4	NA
75	COMMERCE BANKSHARES	6765	5850	2	81/19	0	3328	1	19.0	26	0.5	15.0
76	FIRST ALABAMA BANKSHARES	6745	5917	11	85/15	0	4275	4	24.0	-1	0.3	24.5
77	STAR BANC	6646	5429	6	83/17	0	4858	7	39.9	-1	0.8	17.2
78	INB FINANCIAL	6556	5155	4	80/20	1	4346	4	50.3	-19	1.0	18.2
79	FIRST HAWAIIAN	6511	5337	12	82/18	4	4329	33	10.3	13	0.1	28.3
80	FIRST AMERICAN	6377	5332	-4	81/19	0	3807	-10	51.6	-73	1.6	14.7
81	BB&T FINANCIAL	6229	5204	18	89/11	2	4233	24	38.0	98	0.7	29.7
82	CENTRAL BANKSHARES OF THE SOUTH	6122	4519	28	83/17	0	3598	16	35.3	71	0.9	22.4
83	FIRST VIRGINIA BANKS	6119	5350	13	84/16	0	3515	2	14.0	5	0.4	10.5
84	MBNA	6009	5094	21	99/1	0	2886	8	86.7	50	3.3	0.0
85	HIBERNIA	5818	5302	-18	84/16	0	3744	-28	178.3	7	2.7	14.5
86	MERCHANTS NATIONAL	5806	4405	1	79/21	0	3662	1	60.2	-5	1.5	15.8
87	FIRST FLORIDA BANKS	5770	4995	1	79/21	0	2935	-23	101.8	-13	3.5	38.3
88	RIGGS NATIONAL	5537	4912	-20	79/21	19	2993	-21	43.5	-59	1.1	17.8
89	FIRST CITIZENS BANKSHARES	5466	4824	33	87/13	0	3124	17	15.6	62	0.5	13.5
90	WEST ONE BANCORP	5417	4044	5	83/17	0	3497	6	29.7	154	0.7	13.3
91	SUMITOMO BANK OF CALIFORNIA	5281	4772	13	92/8	21	4535	12	46.8	65	1.0	NM
92	INDUSTRIAL BANK OF JAPAN TRUST	5251	2581	20	97/3	85	2446	-7	29.5	11	0.3	12.3
93	MERCANTILE BANKSHARES	5183	4274	7	81/19	0	3375	2	20.9	39	0.3	25.9
94	DEPOSIT GUARANTY	5059	4076	2	82/18	0	2312	-9	17.3	-63	0.8	20.9
95	FIRST COMMERCE	4995	4354	17	79/21	0	2279	-4	43.7	-8	1.3	17.8
96	PUGET SOUND BANCORP	4884	3769	6	80/20	0	3643	6	33.9	36	0.8	27.9
97	EUROPEAN AMERICAN BANK	4767	4279	-1	74/26	1	1912	-23	42.3	-85	2.3	18.0
98	UNITED MISSOURI BANKSHARES	4692	3410	5	74/26	0	1349	-13	6.0	-8	0.6	9.4
99	CITY NATIONAL	4565	3664	-11	66/34	0	2631	-15	118.0	174	1.9	32.4
100	ISRAEL DISCOUNT BANK	4525	4150	-7	95/5	38	957	-4	20.8	-13	2.2	9.3
ALL COMPANY COMPOSITE (Dollar figures in billions)		2381.6	1731.4	2	81/19	16	1452.2	-3	27.0	13	1.9	15.6

Footnotes on page 98

BANK SCOREBOARD

E B O A R D

PERFORMANCE											MARKET VALUE		
OPER INCOME 1991 \$ MIL.	NET INCOME 1991 \$ MIL.	CHG FROM 1990 %	RETURN ON ASSETS 1991 %	LEVER- AGE 1991	RETURN ON EQUITY 1991 %	NET INTEREST INCOME 1991 \$ MIL.	CHG. FROM 1990 %	NET INCOME AS % OF NET INT. INCOME	5-YEAR AVER GROWTH EPS %	DIVIDEND YIELD	3/28/92 \$ MIL.	CHG FROM 1991 %	RANK
105.2	107.1	121	0.96	15.2	14.6	455	3	23.5	-0.1	4.57	1121	80	43
-86.1	-25.7	NM	-0.22	15.4	-3.4	420	-11	-6.1	NM	2.66	807	113	59
4.4	34.6	361	0.34	21.0	7.0	423	-6	8.2	-29.1	0.00	721	82	65
50.1d	50.1	4	0.47	14.3	6.7	415	-2	12.1	-2.5	3.90	726	128	64
-87.0	-86.5	NM	-0.88	17.7	-15.6	387	-11	-22.3	NM	1.74	NM*	-100	93
89.6	90.0	29	0.96	15.9	15.2	375	22	24.0	7.3	3.25	1010	105	48
-327.9	-224.8	NM	-2.17	50.8	-110.5	332	-26	-67.6	NM	0.00	31	-62	89
-5.3	20.6	NM	0.19	18.0	3.5	345	-11	6.0	-19.8	3.09	526	57	77
-14.8	9.7	NM	0.10	19.6	2.0	400	2	2.4	-31.2	0.00	457	68	80
75.9	80.4	5	0.91	13.7	12.5	341	12	23.6	3.1	3.89	1057	80	46
1.2	2.0	-94	0.02	23.6	0.5	148	5	1.4	NA	NA	NM*	NM	94
66.9	67.2	25	0.77	17.9	13.8	337	41	19.9	16.1	1.32	822	75	57
75.1d	75.1	72	0.96	14.0	13.5	313	-1	24.0	NA	NA	NM*	NM	91
55.0	70.2	169	0.86	15.4	13.3	304	4	23.1	-5.3	3.49	877	89	52
88.2	93.0	6	1.11	13.1	14.6	349	8	26.6	6.2	3.10	1026	54	47
135.4	138.2	15	1.68	9.9	16.6	351	15	39.3	12.0	1.89	2731	69	20
50.0	64.6	2	0.72	14.6	10.6	490	42	13.2	6.4	3.33	715	42	67
85.8d	85.8	13	0.83a	17.7a	14.7a	294	18	29.2	NA	NA	NM*	NM	92
66.2	66.6	17	0.88	15.4	13.6	298	12	22.3	-1.3	3.57	718	56	66
64.3	63.8	33	0.93	16.4	15.3	275	7	23.2	5.2	3.45	804	100	60
96.3	99.3	39	1.36	11.4	15.6	303	4	32.8	9.4	2.48	1111	64	44
34.7	35.0	-1	0.51	11.9	6.0	269	4	13.0	NA	NA	NM*	NM	100
58.5	59.6	30	0.88	13.1	11.6	282	9	21.1	36.8	2.67	883	116	51
48.7	60.4	8	0.99	15.0	14.9	254	13	23.8	8.4	3.11	785	84	62
57.6	59.8	4	0.93	13.3	12.4	225	5	26.5	12.7	2.04	693	46	70
78.6	78.3	14	1.23	11.6	14.3	277	18	28.2	7.3	3.48	954	24	49
67.0	65.8	1	1.03	12.2	12.5	275	8	23.9	10.0	3.71	809	29	58
47.3	48.1	18	0.78	13.7	10.7	246	9	19.6	3.5	2.79	796	87	61
81.5	81.7	14	1.36	12.8	17.4	263	16	31.1	19.0	3.96	842	4	53
14.0	16.9	NM	0.27	16.5	4.5	223	-6	7.6	-30.6	0.00	509	150	78
53.3	60.2	12	1.06	13.3	14.1	240	14	25.1	8.1	3.17	675	59	73
59.1	59.4	21	1.05	16.7	17.5	238	32	25.0	11.1	3.33	654	83	74
69.6	69.6	7	1.22	11.0	13.5	264	8	26.3	5.1	3.62	826	41	56
149.0	149.2	16	2.79	10.2	28.5	241	47	61.9	NA	4.36	1981	NM	32
-164.7d	-164.7	NM	-2.42	24.5	-59.3	247	-13	-66.7	NM	0.00	124	-31	88
5.7	5.8	-63	0.10	16.2	1.7	204	1	2.9	-21.4	2.67	682	151	72
-44.8	-42.4	NM	-0.73	16.0	-11.7	205	-7	-20.7	-3.1	0.00	431	112	81
-71.5	-63.5	NM	-1.09	24.1	-26.2	163	-10	-38.9	NM	0.00	189	12	87
29.2	29.2	3	0.57	19.2	11.0	178	14	16.4	6.2	1.64	235	34	85
39.9	41.2	-7	0.80	14.8	11.8	210	12	19.6	19.3	2.63	537	35	75
40.9	42.9	-5	0.86	17.2	14.8	223	15	19.2	20.1	6.40	215	-4	86
22.6	22.6	42	0.53	9.4	5.0	-235	NM	-9.6	53.5	NA	NM*	NM	97
67.5	70.6	2	1.42	9.5	13.5	214	3	33.0	9.7	2.99	839	14	54
31.4	32.2	31	0.67	17.5	11.7	162	0	19.8	-0.4	4.39	280	38	84
33.9	34.0	54	0.73	19.8	14.5	200	13	17.1	64.9	2.98	465	107	79
49.3	49.1	6	1.05	13.8	14.6	205	14	24.0	10.6	2.78	734	94	63
10.3	6.8	NM	0.24	18.4	4.4	191	-1	3.5	NA	NA	NM*	NM	90
39.4	39.5	6	0.95	11.7	11.1	136	4	29.0	6.5	2.06	535	46	76
-21.2	-21.2	NM	-0.46	14.4	-6.7	187	30	-11.4	NM	0.00	427	-10	82
10.4	11.0	-45	0.24	16.0	3.8	85	-17	13.0	NA	NA	NM*	NM	96
7.6	8.5	-8	0.32	18.2	5.8	81.2	5	10.5	-13.7	3.06	184.7	51	

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A DOUBLE STANDARD FOR CELLULAR PHONES

Two systems will coexist, each better for having done battle

It looked like a disaster in the making. In 1990, just months after the cellular-phone industry endorsed a technology standard for future digital phones, the carefully knit accord began to unravel. A few cellular operators began to explore a new possibility—an untested Pentagon spin-off that promised more capacity.

Before long, two camps formed around the rival technologies. Hardening in their positions, the partisans prepared to gamble billions in new equipment that the other side was wrong. Some cellular-telephone executives began to fear that a squabble like the one between VHS and Beta home-video systems could seriously impede development of the fledgling industry.

Those concerns weren't entirely off the mark, to be sure. Incompatibility in forthcoming digital-phone systems is shaping up as a real headache. Customers who want the best class of service in each market will have to wait for costly three-in-one phones that will work on both of the emerging digital standards as well as the old analog one. "No question, it would have been good for the industry if there was one standard," says Bruce DeMaeyer, president of Ameritech Mobile Communications.

CELL DIVISION. But it isn't a disaster, either. Far from it: While they are trashing each other in public, cellular operators are cooperating behind the scenes to insulate customers from most compatibility problems. Old analog phones will still work everywhere. What's more, by not locking in a single standard prematurely, the industry should wind up with better technology.

The new digital contender, known as code-division multiple access (CDMA), offers greater security and more call-handling capacity, easing congestion on the airwaves. And the older time-division multiple access (TDMA) technology may get a boost, too. Prodded by the newcomer, backers of TDMA will probably work harder to get more out of their systems (table). On balance, the dual standard may lead to greater innovation, says Herschel Shosteck, an independent

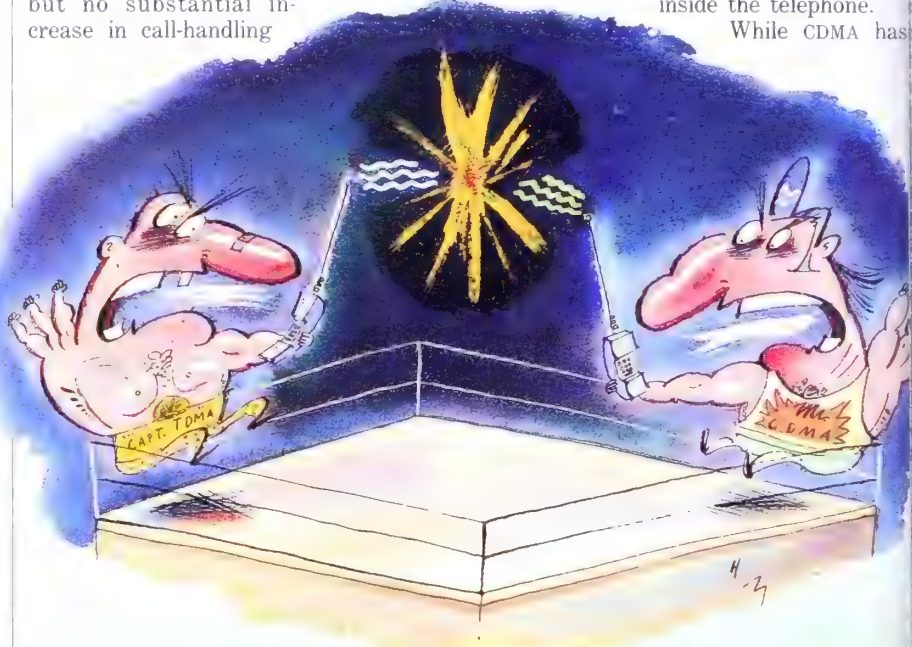
market researcher in Silver Spring, Md.

The situation in Europe's cellular-phone market supports that thesis. There, a cousin of TDMA was locked in as the official standard four years ago, and it is already looking a bit long in the tooth as commercial rollout begins. Its first generation offers higher quality but no substantial increase in call-handling

capacity, in contrast to the anticipated improvements of as much as sixfold to fifteenfold for TDMA and CDMA, respectively. In the U.S., "customers will get a better product in the long run," says Centel Cellular Co. President William J. Laggett.

Of course, in 1990 the U.S. industry figured that with TDMA it had picked a clear winner. TDMA chops calls into snippets that take turns traveling over channels. But when CDMA emerged—via military contractor Qualcomm Inc.—it seemed clear to many companies that the newer alternative had advantages. CDMA spreads the digital bits of a voice or data call across a wide range of frequencies. All calls share the same frequencies and are distinguishable only when filtered through a decoding chip inside the telephone.

While CDMA has



BATTLE OF THE INITIALS

TDMA TIME DIVISION MULTIPLE ACCESS

CDMA CODE DIVISION MULTIPLE ACCESS

HOW IT WORKS

► Calls are cut into slices 6.7 thousandths of a second long and intermixed so that as many as six calls can travel over the same cellular channel

► Each call uses the entire band of cellular frequencies. Calls are encoded so only the intended receiver can separate them from background noise. Initially 10 to 15 times analog capacity

PROS AND CONS

► Technology is better tested and fits better with today's analog systems. Initial capacity is less than that of CDMA

► More capacity, more security than TDMA. Requires more computer processing. Technology needs perfecting

KEY SUPPORTERS

► McCaw Cellular, Southwestern Bell, BellSouth; all major equipment manufacturers

► U.S. West, Pacific Telesis, Ameritech, GTE; many major manufacturers

DATA: BW

n promise in early testing, it has been put through the kind of field that TDMA has passed. McCaw Cellular Communications Inc. Chairman O. McCaw argues that holding out the new technology is folly. Says McCaw: "We have a term for that: waiting for the Messiah."

mid-1993, McCaw expects to have rolled TDMA systems in all of its markets including Los Angeles, Miami, New York, and Seattle. Carriers will shell out \$1 billion for TDMA gear in the next year, says Shostek. By contrast, CDMA is up to a year more before a standard is set and 12 months to 18 months before that before commercial rollout.

FOR THE TWAIN. So TDMA is the standard of the present. But CDMA supporters insist theirs is the standard of the future. They say CDMA can serve many more customers for little extra equipment cost, allowing cellular to become a low-price, mass-market service. It's especially important now that other companies are seeking space on the airwaves to launch low-price wireless services in competition with the cellular operators.

Despite efforts to minimize the pain of incompatibility between digital standards, customers will have to make adjustments. Those who travel to an area where a different standard is in use will have to revert to one of the old-fashioned analog channels—either that they buy a phone that will work on both digital standards. Sound quality on the analog channels won't be as good, and analog is poorly suited for transmission of digital data. Driving between different systems could be chancy, too: Having two digital standards complicates the procedure of switching off a call in progress as it moves from one system to another.

The good news, though, is that technology will ameliorate some of the compatibility problems. For instance, it appears that phones designed to work on multiple standards won't weigh a ton. Ericsson GE Mobile Communications recently unveiled a sleek combination TDMA-analog phone that weighs 10 ounces, compared with about 7 for the lightest analog-only phones.

So one is overjoyed about the split in the cellular standard—least of all manufacturers, who together shelled out \$200 million to \$300 million developing TDMA and now face a similar expenditure on CDMA. But that money is advancing the state of the art. Even TDMA supporter T. Stupka, president of Southwest Bell Mobile Systems, concedes that the rival CDMA standard has its pluses. He says: "It's a problem of riches. And rather than have a problem of riches than of poverty." Clearly, diversity has its advantages.

By Lois Therrien in Chicago

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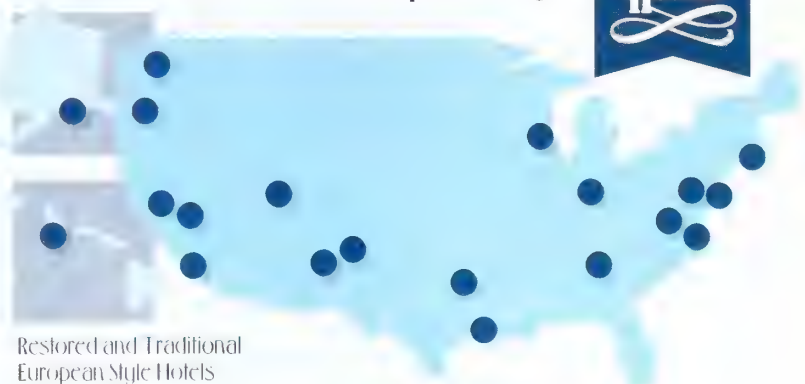
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PUTTING PCs WHERE MAINFRAMES USED TO REIGN

Canada's Systemhouse now tops the red-hot client-server field

In early 1991, SHL Systemhouse Inc. looked as if it might be down for the count. Business was at a standstill for the computer-systems integrator. Its stock traded at 4, down more than 80% from its 1987 high. Although the company had been on the block since May, 1990—following the financial collapse of the holding company that controlled 50.1% of its stock—there were no takers. "Customers were worrying whether they would even be in business," recalls Charlotte Walker, chief executive of Martin Simpson Co., a securities research firm.

A year later, Systemhouse is not only alive, it's thriving. It has important new contracts (table), and its stock has soared to above 13 on NASDAQ. More important, the company is emerging as a hot prospect in one of the fastest-growing fields in information processing: client-server computing. Using networks of personal computers and workstations instead of mainframes, these setups can be created faster and with smaller hardware budgets. As a result, client-server projects have become the fastest-growing segment of the \$15 billion systems-integration market. Last November, market researcher Gartner Group Inc. cited Systemhouse as the leader in this segment.

HEADED SOUTH. How has Systemhouse done it? Much of the credit goes to John Oltman, 47, who took charge last July, six months after the board forced out CEO Roderick Bryden. A 21-year veteran of market leader Andersen Consulting, Oltman is "one of the top three executives in the industry," says Walker.

But Oltman, who sleeps no more than four hours a night and relaxes by helicopter skiing, was restless. He figured that companies such as Andersen and EDS, which pioneered systems integration on mainframes, couldn't shift easily

to workstations and PCs. Systemhouse already was selling and servicing PCs. Since joining, Oltman has hired more than 15 top executives from competitors and emphasized client-server systems.

Now, Oltman is pushing hard south of the border. On Apr. 6, he lured Andersen veteran James K. Burns from the top information technology post at

the U.S. Postal Service. And the Los Angeles fire department recently chose it to install a \$20 million dispatch system based on PC networks: Its proposal was not only cheaper than a mainframe-based system but faster.

DEEP POCKETS. The most important deal in Systemhouse history is now being negotiated back in Canada. It's a far-reaching partnership with Bell Canada and Bell's parent, BCE Inc., Canada's largest company. BCE already has a 26% stake in Systemhouse. Under the agreement in principle signed in February, Systemhouse would acquire and operate Bell Canada's mammoth data centers. One of the biggest outsourcing agreements ever, it would boost Systemhouse's revenue by at least \$175 million annually and could exceed \$2 billion over 10 years.

Bell Canada and Systemhouse would also form a new company to meet Bell Canada's systems-integration needs and sell similar services to other telecommunications companies. And Systemhouse, which has lost \$51 million in the past two years, would be on solid financial footing because BCE would put up \$348 million to boost its stake to 60%.

A partner with deep pockets will come in handy as Systemhouse takes on bigger rivals. Andersen, for example, has 23,000 employees around the globe, compared with Systemhouse's 3,000. And W. James Fischer, managing partner for technical services at Andersen, is not ceding the lead in client-server systems to the upstart. "We will soon have more employees trained in client-server than they have employees," he says, adding that 80% of Andersen's \$1.4 billion systems-integration business already involves some client-server technology. Oltman counters that it will be hard for big guys like Andersen to be cost-effective in client-server computing.

In the post-mainframe era, a leaner, faster-moving organization may have an edge. "Systemhouse has potential in the U.S.," says Mel Bergstein, another Andersen alum and now vice-chairman of systems integrator Technology Solutions Co. Indeed, it would be risky to underestimate a company that has come as far as Systemhouse has in the past year.

By William C. Symonds in Toronto



SYSTEMHOUSE'S BIG CONTRACTS

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IBM CANADA Providing technical and marketing support for IBM's RISC System/6000 in Canada	100
GOVERNMENT OF NOVA SCOTIA AND MARITIME TELEPHONE & TELEGRAPH CO. Outsourcing to a single Systemhouse center	100

DATA: COMPANY REPORTS

Goldman, Sachs & Co. to head U.S. operations. Systemhouse needs rapid growth in the U.S. to reach Oltman's goal of \$1.7 billion in annual revenues by 1995, up from \$579 million in fiscal 1991, ended last Aug. 31. Oltman wants to boost U.S. revenues from 1991's \$95 million to \$1 billion within five years.

The U.S. unit has a running start. In 1991, it won a \$270 million contract from

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HDTV HOMES IN ON THE ULTIMATE TEST: THE MARKET

Soon, the FCC will choose a standard. But when will advertisers and viewers embrace the technology?

Even a dazzling display of supersharp HDTV couldn't impress many broadcasters who gathered in Las Vegas on Apr. 13 for their annual convention. Warren P. Williamson III, president of CBS Inc. affiliate WKBN-TV in Youngstown, Ohio, is a case in point. He doubts that the technology will expand his audience quickly. So to start, he says, "we'll lose some money on HDTV operations." Still, Williamson is resigned to spending millions for a transmitter and production gear to send out HDTV programs alongside his regular signal.

After oodles of speculation over if, when, and why, HDTV's path from the engineering bench to the marketplace is finally starting to look clear. TV makers acknowledge that most consumers won't sign on until sometime early next century. But the Federal Communications Commission, in a timetable issued on Apr. 9, spelled out how that might happen. By late next year, after a decade of wrangling, the FCC should decide on a U.S. broadcast standard. That will give the green light to electronics makers, who are desperate for a hit to end their sales doldrums. Cable operators will try to sign in next, by charging a premium for HDTV channels. They'll be followed

pretty quickly by the TV networks and by local broadcasters, who'll no doubt still call it "high-deficit TV." Assuming that U.S. chipmakers and electronics makers take the lead, officials in Washington even see HDTV as a potential cure for some of America's trade ills.

The first hurdle to clear before all this can happen is the technical one. The Advanced Television Test Center Inc. in Alexandria, Va., an industry-sponsored group under contract to the FCC, has already tested an analog HDTV system from NHK, the Japanese national broadcasting company. Now, its engineers are perusing four more-versatile digital systems—the FCC's odds-on favorites. In each case, the plan is to squeeze a low-power digital signal into channels that are now left vacant between existing stations to prevent interference. At the broadcast end, transmission gear will digitize and greatly compress the pic-

ones—just as today's sets do. This method is used by a consortium of NBC, the David Sarnoff Research Center, and two European-owned electronics giants—Philips and Thomson, as well as by an entry from the team of Massachusetts Institute of Technology and cable-equipment maker General Instrument Corp. In the other approach, the electron beam paints every line progressively. That's more complex and costly, but the picture is sharper. The team of Zenith Electronics Corp. and American Telephone & Telegraph Co. uses this technique, as does a second entry from GI and MIT.

These ambitious technological leaps,

2002-03

If HDTV follows the pattern of the conversion from black and-white to color TV, manufacturers could sell the millionth HDTV set, reaching 1% of the U.S. market

1995-96

The first sets may appear—at \$3,000 and up. Cable operators and broadcasters in major markets begin limited programming—first movies, then sports. Broadcasters in smaller markets will follow years later

tested so far using computer-simulated interference, will get their first field trial next year in hilly Charlotte, N.C. Some experts, such as former MIT Professor William F. Schreiber, warn that the digital systems won't tolerate the electromagnetic interference in such a metropolitan area. "Under rapidly varying conditions, you will lose the picture entirely," says Schreiber. He thinks that using proven analog technology would get HDTV to market much sooner. The manufacturers, however, say they expect digital systems to work.

Once they do, the FCC may anoint just one or meld several into its standard. Then, manufacturers will race to reduce the bulky electronics in the prototypes to

1994

Electronics manufacturers begin engineering and building transmission gear, HDTV sets, and video-cassette recorders

LATE 1993

The FCC expects to choose a digital transmission standard from those proposed by four teams of companies

ture, sending out a torrent of data—20 million bits of information per second. High-speed, sophisticated computer chips in the TV receiver will then reassemble the bits into a picture.

FIELD TRIAL. The four systems in the ring differ only slightly in the way they do this. Two of them create the picture by scanning every other one of the 1,000-plus horizontal lines on the screen, then going back and filling in the remaining

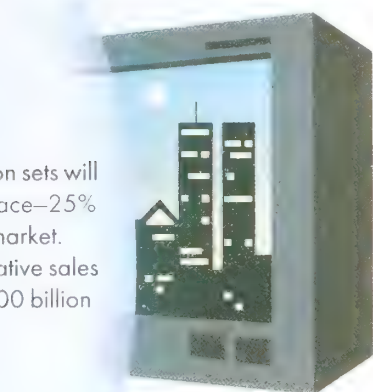
THE FUTURE OF HDTV

For more than a decade, electronics companies, broadcasters, and government agencies have been wrangling over the technical standards for HDTV. Now that a decision is within sight, here's how the market may develop



ful of semiconductors, kicking off could be a vast new market in both alized video and memory chips. technical specifications set, manu- rers will also build a new HDTV gen- on of VCRs and other gear. Al- gh some experts believe the able is a couple of years too opti- e, TV makers expect HDTV to be r for market by 1996. First out will series of 20-inch to 40-inch picture- sets and larger projection TVs.

USIASTS. It's this homegrown ap- h that electronics makers see as a advantage. If American companies as Zenith and AT&T win the stan- and develop the key chips, they'll an edge over foreign rivals. And could even entice U.S. manufactur- back into consumer electronics. t could be very helpful to the trade it over time," says J. Richard



on sets will
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00 billion

on, president of the American Elec- cs Assn. The U.S. companies will to move fast, however. The FCC will re the winner to license the trans- on and receiver technology. So, the ese and European electronics firms now dominate the industry will be to build HDTV sets.

ce these sets and other equipment ar, the rest of the TV world will act. e operators may go first, says Mat- D. Miller, vice-president for tech- y at GI. They'll be after enthusiasts will pay \$3,000-plus for sets—and a um for a tier of HDTV channels. use they'll need less new gear, ca- operators—who merely distribute rams—won't face costs as high as broadcasters will. Of the networks, Broadcasting Co. may jump first. ed, it says it will begin installing broadcast equipment at seven sta- as soon as possible after the stan- is set. That could force ABC, CBS, NBC to follow suit. Broadcasters are ng to HDTV to "protect our back-," says John D. Abel, executive vice- dent at the National Association of ecasters.

at has broadcasters nervous is un- inty over how fast these trends will

develop. Advertisers embraced color TV in the late 1950s because it made selling products easier. This time, a few, such as Nike Inc., have developed high-defini- tion ads for large closed-circuit TV broad- casts. But there's no groundswell yet. "Advertisers are not going to drive this," predicts Arthur R. Tauder, senior vice-president at McCann-Erickson Worldwide. "It's just not seen as that big a leap, the way color was."

It will take work to overcome this per- ception. In a recent study in Canada, college students said they were impressed by HDTV's sharper images. But research at MIT's Media Laboratory in 1987 suggests that view- ers care more about the quality of the program- ming than the picture. Director of Commu- nications Research W. Rus- sell Neuman had view- ers compare a 28-inch widescreen high-defini- tion set and a similarly sized conventional TV. He found they preferred HDTV when watching up close. At 9 feet, a typical couch-potato distance, most viewers couldn't see the difference.

In a similar experiment, Neuman used both an HDTV camera and a conventional one to tape a New York Jets football game. Viewers preferred the game on today's TV, perhaps, he speculates, be- cause the operator of the older camera caught the action better. "If the wrist angle of the cameraman can blow 20 years of research out of the water, may- be they should rethink what they're do- ing," Neuman adds. HDTV advocates say his conclusion is invalid because larger screens weren't tested.

Indeed, the key to making HDTV ap- eal to viewers may be bright screens of 35 inches or more. HDTV's edge is clear on large projection sets, but they gener- ally aren't bright enough to be viewed comfortably in a well-lit room. More ex- otic approaches—high-resolution flat- panel displays that would hang on a wall—are still in the lab. "The problem they haven't solved is big flat-panel dis- plays," says Julius Barnathan, former ABC president of broadcast operations and engineering. The U.S. Defense Ad- vanced Research Projects Agency is funding work on these. The Japanese are making progress, too. But most ex- perts believe such displays won't be available for eight more years—at least not a price anyone will pay.

Price could speed or slow the market a lot. In gadget-crazy Japan, consumers haven't rushed to tune in even though

NHK has been beaming HDTV eight hours a day. TV makers had once expected to blanket Japanese homes by now. But only a few hundred 35-inch-plus sets have been sold—at \$20,000 and up. Sharp Corp. and other TV makers recent- ly cut prices to about \$7,600. That may lure videophiles but not the mass mar- ket. "The price will have to come down significantly," says D. Joseph Donahue, senior vice-president of Thomson Con- sumer Electronics. Many experts put the magic figure at \$1,000, which they ex- pect to see by the late 1990s.

By then, the networks may be rolling ahead. The FCC wants to get HDTV moving so it can take back the old chan- nels for other uses. To speed the conversion, it plans to give stations a second channel for HDTV programming—and let broadcasters initially use it any way they want. After four years, they would have to "simul- cast" the same fare they show on regular TV.

Since a broadcast li- cense is a lucrative as- set, the FCC is under fire for granting a second

channel without making broadcasters compete for it. To blunt that criticism, the commission plans to allow 15 years for the transition. After that, stations would have to give up their current channel—and switch entirely to HDTV.

LIVE SPORTS. At least, there'll be plenty of programming available. Today's video cameras don't produce the high-resolu- tion images the technology requires, but movies already have that. Both cable programmers and the networks have ex- tensive film libraries. Some TV shows, such as *L.A. Law* and *Cheers*, are also shot on film. And Rebo Studio, a high- definition production house in New York, is building a library of concerts, plays, and other programs.

The first live broadcasts will probably be sports: It's popular, and program- mers think the fast action plays to HDTV's strengths. NBC plans its first tri- als by the late 1990s. "We're hoping that putting it on the network will help drive the market," says Michael J. Sherlock, NBC's president of operations and techni- cal services. "We'll be watching the rat- ings carefully." So will the rest of the world. Engineers have had a decade to play with the technology. Now the day is in sight when viewers will get their chance.

By Mark Lewyn in Washington, with Lois Therrien in Chicago, Gary McWilliams in Boston, and Neil Gross in Tokyo

**WHAT A
BROADCASTER WILL
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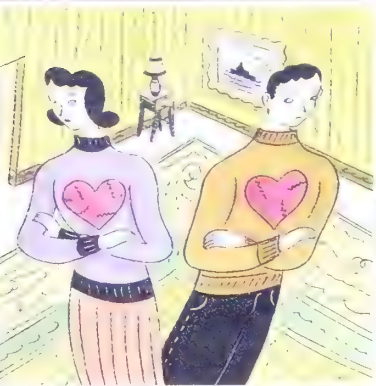
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Ablow-up now and then between married couples could be good for the wife's health, say researchers at the University of Michigan at Ann Arbor. In a study of 192 couples, psychosocial epidemiologist Mara Julius found that if both husband and wife suppressed anger, the mortality rate for women from heart attacks was 11%. This dropped to 7% when only the husband expressed anger. When both "let it out," the female death rate was zero. Julius studied traditional couples, in which the wife is the homemaker and the husband the breadwinner. She says that sulkers, holding in their anger, have the highest risk of death. That's because these people also tend to have such unhealthy habits as smoking or alcohol abuse. And, she says, suppressing strong feelings could provoke a biochemical imbalance that affects the cardiovascular system. Anger-suppressing husbands were about twice as likely to die of heart attacks as husbands who let out their emotions.

FASTER PHOTO FAXING, CHUNK BY CHUNK

Fax machines are mighty fast at sending words over phone lines. But when it comes to pictures, even the best machines hit the brakes. When presented with the shades of gray in a typical picture, the devices must scan each spot and represent it with a mosaic of black dots and white spaces, adding up to a lot of information. That's why transmitting a typical image on a standard 8½-by-11-inch piece of paper takes a long time—roughly 80 seconds. Electrical engineer Kevin J. Parker at the University of Rochester has found a way to cut this time dramatically—to 18 seconds. Instead of transmitting information for every spot, Parker's system divides the picture into blocks—from 50 to 250 depending on its complexity. Then, it calculates and transmits an average "grayness" value for the entire block and values for a few places in each block where the actual tone differs from the average. As a result, transmission is four or five times faster, while regular fax quality is retained. Parker believes even more complicated calculations could further reduce transmission time. Meanwhile, he has filed a patent on his system.

A SHARP-EYED MICROSCOPE GETS A BROADER POINT OF VIEW

Being able to examine, measure, and chart tiny details is a key to making everything from semiconductors to machines. But that requires an electron microscope of enormous range, one that can zero in on features as small as one-millionth of a millimeter yet pull back for the bigger picture. Researchers at the National Institute of Standards & Tech-

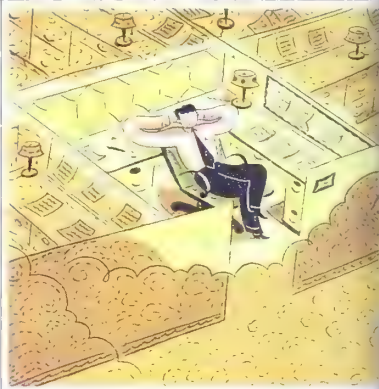
nology are building such microscopes. The scientists use standard scanning electron microscope technology, a flexible tube that scans back and forth over the object being observed. Since the tube has a limited range of motion, the scientists add other mechanisms for moving the object under the microscope. So far, they've built a device that has a field of view nearly six times as wide as the widest one currently in industrial use, ranging from a millionth of a millimeter to three-fifths of a millimeter. And they're working on an instrument that is able to view objects up to a centimeter wide. The new microscopes will let companies measure products with unprecedented accuracy. They will also allow better calibrations of standard microscopes, enabling these devices to make more accurate measurements. Says NIST physicist John Villarrubia: "This is our serious attempt to do the job right."

HEARING AID BATTERIES: IF YOU CAN'T CHANGE 'EM, CHARGE 'EM

When their products shrank to near-invisibility, hearing aid manufacturers faced one more challenge: how to make the tiny battery cells in the devices easier to replace. A St. Petersburg (Fla.) company, Best Labs, thinks it has the answer: SolarEar, a hearing aid with a solar recharger. Invented by H. C. Knapp of Grand Rapids, Mich., and now made by Best Labs, SolarEar means arthritic fingers need no longer fumble with batteries half the size of a thumbnail. A solar collector inside a 4-inch-square case converts light into stored energy during the day and recharges up to two hearing aids at night. The case holds a charge for 10 days, allowing the hearing aid to work much the same as a portable phone. The process is so simple that "it makes the recharging process error-free," says Best President Harvey Romanek. He expects the new hearing aid to have environmental appeal, with less battery disposal. Next, the company hopes to license its patent to manufacturers of pagers and cellular telephones.

SPACE-AGE VENTILATION THAT HELPS YOU BREATHE EASIER

Stuffy offices may be more than just uncomfortable: The recirculated air may be full of contaminants. Now, a North Carolina State University engineer is developing a way to clean air inside offices, factories, and even cars. David F. Ollis and his team built a lab-size ventilation system that uses a process called photocatalysis. Air is circulated through a purifier—a ceramic cube with lots of tiny holes, like a honeycomb—coated with a catalyst, titanium dioxide. When UV lamps illuminate the cube, the catalyst reacts with oxygen in a chemical process that burns up such contaminants as benzene as well as solvent traces and tobacco odors. Titanium oxide is ideal for this system because, unlike most catalysts, it works at room temperature, so no extra heating is necessary. The researchers plan to install a building-size system this summer using conventional ventilation ducts, with the purifier in the recirculation flow. The work is funded by NASA, which is seeking ways to purify air in spacecraft.





THE NEW CORPORATE ORDER

THE 1992 BUSINESS WEEK
PRESIDENTS' FORUM

by Barbara H. Peters and James Peters

Much as the new economic and political boundaries are dramatically altering the world map, new corporate alignments are fundamentally changing the internal and external patterns of business relationships. Simply put, leading executives of companies around the globe are now laying the foundation of a new corporate order, one that is changing the very nature of corporate management.

Increasingly, corporate relationships are characterized by a distinct spirit of cooperation, if not by full-fledged alliance. That is the message Warren Bennis, professor at the University of Southern California, brought to The 1992 *Business Week* Presidents' Forum held recently in Palm Springs.

"The overarching issues of this decade — for companies as well as for nations — have to do with relationships, and how they are transformed by federation, collaboration, partnership, and teamwork," Bennis says. "Moreover, alliances will be the springboard to the next level of business innovation, growth, and profitability."

THE VALUE OF COOPERATION

The consensus among the presidents at the *Business Week* forum, all leaders of large and prestigious North American firms, is that those senior executives who negotiate the most successful alliances and partnerships — within their firms, with other corporations, and with governments — will be champions of the globalized future.

Jordan Lewis, noted author of *Partnership for Profits: Structuring and Managing Strategic Alliances*, predicts, "The high ground will be owned by companies that leapfrog cross-cultural and cross-organizational boundaries to forge intra- or inter-company teams. Today, competition has become a team sport. We must compete and cooperate at the same time."

THE NEW CORPORATE ORDER

For alliances to succeed, Lewis says that companies need to observe certain rules of cooperation. "Companies must share clear objectives; they must demonstrate a mutual need; they must share risks; and they must develop trust through personal relationships and teamwork."

TEAMING UP TO CREATE ADVANTAGE

Senior executives now see corporate change as an enduring fact of business. "Transformation is not an event; it will not stop once a company

restructures. Transformation is a continuous process that should lead to organic growth," says Daniel J. Valentino, managing director North America of Gemini Consulting.

"Typically, when companies realize that constant change is integral to their future success, they acknowledge a need for additional or complementary resources to plan and implement the transformation of their business and to teach them how to deal successfully with ongoing change." Multiple skill sets, different methodologies, and a culture that thrives on diversity become the new essentials.

Gemini Consulting itself was launched from the union of three strong organizations with distinct cultures. "Our alliance was a response to the company's vision to be the global consulting leader in business transformation. We believed our differences would create a synergy that would make a difference to our clients, our people, and the world. Our alliance has enabled us to be a laboratory for change, a test run for our clients."

Cross-corporation teamwork, another alliance model, has been a part of Boeing's competitive strategy since the early 1980s. "To secure and implement specific projects, we have partnered with many companies," says Art Hitsman, president, Boeing Computer Services. "But we haven't teamed up for teamwork's sake. Any alliance must have a clear purpose and salient mutual benefits. The guiding principle here is that the program is the goal; you win only if the joint project succeeds."

New York Life Insurance Company has netted a big win in its organization as a result of internal teaming efforts. Lee M. Gammill, the firm's executive vice president, describes his company's old organization as a group of discrete fiefdoms. "All the functions worked serially and independently," he says.

Today, New York Life is driving cross-functional teams into every department and level of its organization. Gammill says the approach has

often been called an "adhocracy" because it brings everyone on board from day one in a project-by-project process. The approach has already delivered big gains: Gammill reports an augmented and updated product portfolio and enhanced company-wide communications.

FROM RIVALS TO ALLIES: "COOPETITION"

Another take on alliances comes from Novell. The producer of Netware, a system software that networks personal computers, minicomputers, and mainframes. Novell knew that customers could be better served by a vendor alliance. So, Darrell Miller, executive vice president, spearheaded the Technical Support Alliance. Already a year old, the confederation includes Apple, Borland, Compaq, DEC, HP, Intel, IBM, Lotus, Microsoft, and Sun Microsystems.

To make the alliance work, Novell had to coax rivals into sharing customers and proprietary information — a tall order. Miller concedes that organizing the alliance was tricky, but this form of "coopetition," as he calls it, is critical not only to Novell's growth but also to the industry's. The results are striking — thousands of compatibility problems have been unraveled.

Opus One wine, the joint venture between Rothschild Vineyards in France and Robert Mondavi Winery in California, is one of the most remarkable alliance models: cooperation between companies of different countries, making a product whose marketing has traditionally carried a strong nationality component. And the goal of Opus One is succinct — "to produce the world's greatest wine."

Michael Mondavi, managing director and CEO, credits kindred objectives as a primary factor in the Opus One success. "Mondavi wanted to learn more about the art of winemaking — better ways to train vines, better techniques to blend wines. Rothschild, on the other hand, hoped to learn more about the science and technology of making wine. By blending the art and science, we have produced a superlative wine."

TIES TO CUSTOMERS AND SUPPLIERS

Business survival tomorrow may mean shifting to a wholly new corporate paradigm, one that places highest value on cooperation with two key stakeholders: customers and suppliers. MCI Communications Corporation is one company that is designing its future by embedding that mindset throughout the organization.

"Our corporate culture puts the customer first," says Kevin Sharer, president of business markets for MCI. "We provide a service that runs through the corporate body like a central nervous system.



Daniel J. Valentino
Managing Director North America
of Gemini Consulting

Business transformation is not an event . . . it will not stop after a company restructures. Transformation is a continuous process that should lead to organic growth.

nce no two customers have the same information flow or billing system or reconfiguration needs, we can't sell off-the-shelf solutions. MCI adds value by being willing and able to customize services to meet customer needs."

MCI's flexibility extends beyond tailoring services to meet specific customer needs. Technology application, one of the firm's core competencies, is leveraged by partnering with customers to invent new services. "Prototyping services for customers creates complementary business opportunities," Sharer explains. "Service prototypes give customers an advantage over their competition and, at the same time, puts MCI in a first-to-market position with a new product."

Hand-in-hand with MCI's intent to deliver flexible services, is "an absolute dependence on suppliers." MCI has built its technological platform — a driver of the company's growth — on close day-to-day working relationships with suppliers. "We don't manufacture," Sharer notes, "so we depend on our suppliers. We shop the globe for world-class suppliers who enable us, in turn, to provide innovation and quality that fuel our customers' success."

The "creative interdependence" that Sharer describes will spread from industry to industry as more companies concentrate on their core skills and outsource the rest. That is already the practice at General Electric. "As GE backs away from full functionality, we look to our suppliers as partners in pursuing business goals," says John D. Rittenhouse, senior vice president at GE Aerospace.

"Speed — a major goal — is translated into cycle-time reduction in our plants," Rittenhouse explains. An example of how that plays out in production comes from GE's appliance group. "In 1990, it took 18 weeks to deliver a refrigerator. By finding a best-practice we discovered — in Australia — to our Louisville facility, we cut delivery down to eight weeks. Suppliers worked with us to make it possible, and they will continue partnering with us to reach our stretch goal of a 1.5 week turnaround."

PARTNERING WITH YOUR OWN PEOPLE

One of the most important partnerships a company builds is those with its own employees. For Roger Sant, chairman and CEO of the AES Corporation, that means "creating an environment where people are empowered to use their skills to meet customers' needs." To support such a climate at his energy company, Sant is delayering management — only two tiers exist between the CEO and entry-level people — and organizing all work around small, multidisciplinary teams.

So far, the operating results are impressive:

Lost-time accidents are 8% of industry average, environmental emissions are less than 50% of permits, and real cost is declining while energy availabilities are increasing.

Faith Wohl, director of work force partnering at Du Pont, agrees that teamwork has powerful benefits. Yet, given the profound demographic and social changes now underway in the US work force, she raises many provocative questions about the future of teams. "Because of growing family pressures, employees are determined to achieve greater balance between work and family in their lives. And this may affect what they are willing to commit to their team."

Wohl asks, "Can we emphasize teamwork when family issues increasingly pull team members away from their jobs, leaving colleagues to juggle even more work in their absence?" Questions such as this, Wohl says, have spurred some innovative business responses: corporate child and elder care programs; flexible work schedules; and extended family leaves. "The real solution," Wohl insists, "starts with knowing what your people need and what they value."

Lynn R. Williams, international president of the United Steelworkers of America, supports Wohl's view of teamwork issues. "US companies must see workers and unions as assets, not costs," he says. With a corporate model that values teamwork, Williams sees the possibility of "unleashing the full productive potential of our work force."

A SHARED ACCOUNTABILITY

With America's preeminent position in the global market threatened, it is fashionable to debate the reform of corporate governance as a means of revitalizing US business. Corporate governance — the relationship between owners and managers — is the highest form of internal partnership. Christopher J. Steffen, executive vice president and chief financial and administrative officer of Honeywell Inc., describes corporate governance as a system of checks and balances designed to increase long-term shareholder value. "Its goal," he says, "is to maximize the return for all corporate constituencies." Steffen sees short- versus long-term performance as the heart of today's debate, which is closely connected to the question of US competitiveness. "The debate distills to one issue: allocation of resources. Technology requires investment in R&D. And upgrading knowledge and skills demands investment in training," he says.

THE NEW
CORPORATE
ORDER



Kevin Sharer
President of Business Markets,
MCI Communications Corp.

*Our corporate culture
puts the customer first.
And since no two businesses
have the same
needs, we don't provide
off-the shelf solutions.*

THE NEW CORPORATE ORDER

Reform of corporate America ranks high on the agenda of T. Boone Pickens, founder of Mesa Petroleum. In 1987, Pickens founded the United Shareholders Association (USA) because "America's corporate managers had lost touch with their shareholders, leaving investors out in the cold." USA members and other activists are now leading what Pickens calls a "justifiable shareholder revolution."

BUSINESS AND GOVERNMENT ALLIANCE

To move forward in a global market absent a true partnership between industry and government is a challenge that grows more economically hazardous each day. At least that is the view of many senior executives in industries facing the challenges of Japanese keiretsu and the competitive muscle of a unified Europe.

Those concerns, and others, are driving the Bush administration's "economic growth agenda," says Susan Schwab, Assistant Secretary of State and director general of the US and Foreign Commercial Service. "The agenda advocates a strategy fixed on long-term growth and productivity, and has four key elements: encouraging savings and investment; opening new market opportunities while eliminating foreign trade barriers; reducing government regulation; and promoting an educated and dynamic work force."

US Senator John B. Breaux (D-LA), believes federal, state, and local authorities are still missing the mark on the education front. "Our future competitiveness will depend on the collective capability of our work force. So, we all need to rethink vocational education."

While supporting government projects in education, T.J. Rodgers, president and CEO of Cypress Semiconductor, urges caution when it comes to government/industry research consortia. Citing

Sematech, the semiconductor technology alliance, Rodgers complains about a tendency to "fence out all the small firms." Rodgers endorses industry self-reliance because "once the government walks away, ventures often don't work out as envisioned."

Believing that government has a role to play in key areas, George M.C. Fisher, chairman and CEO of Motorola and chairman of the Council on Competitiveness, goes on to suggest that the competitiveness issue is largely US industry's problem. "We need to invest in people by funding continuous education in the workplace, and we must step up boldly to the quality issues." Government, in turn, Fisher says, "must encourage an environment for all of us to work in. For America to win, the government must assure market access. In short, government has to be a facilitator and a cheerleader for US business."

FOR THE COMMON FUTURE

Methodology aside, there was unanimity among the Forum's delegates that a strong US economy is essential to business growth. They heard leader after leader assert that business, government, labor, and academia must forge some sort of national alliance to promote economic priorities for the country's common future.

"In order to walk into that future," Dr. Bennis advises, "leaders must, in one way or another, disturb the present." Based on reports from the corporate frontlines presented at the 1992 *Business Week* Presidents' Forum, US business leaders are, indeed, shaking the old foundations and casting a new corporate order.

Barbara H. Peters and James Peters are New York based business writers

THE NEW ORDER OF COMPETITION

According to Claude Rameau, Dean of INSEAD, the European Institute of Business Administration, business leaders are discovering that the new corporate order will compel a voyage from certainty to ignorance, as companies from every industry come to terms with the forces of globalization, integration, and other new forms of competition.

Gary Hamel, associate professor of strategy and international management at the London Business School, speculates that the main competitive bout of the 1990s will be to develop basically new businesses. "Companies will create new industries for the future. This battle isn't about competition for market position, cost, or quality," explains Hamel. "It is competition for industry structure." Four ingredients are needed:

- Intellectual leadership capable of defining the evolution of an industry;
- Core competencies that allow a company to preempt the future;
- A fertile corporate imagination that can conceive the inconceivable;
- A capacity for expeditionary marketing to better explore and create new market territory.

"Competing for the future demands a different view of strategy," advises Hamel. "It dictates a stretch in corporate aspirations, a capacity to leverage resources, and a commitment to pursue the ambitious goal."

THESE REPAIR JOBS ARE TAKING LITTLE LONGER THAN EXPECTED

and GM paid dearly to get into Europe's luxury-car market. Two years later, they're still paying

years ago, General Motors Corp. Ford Motor Co. both courted British Jaguar Cars Ltd. By bidding \$2.6 billion, Ford won Jaguar. To recoup, it acquired 50% of Sweden's Saab Automobile for \$600 million. But as recession and increased Japanese competition have hurt sales, both Ford and GM are reshaping their European catches.

JAGUAR: QUALITY IS UP, BUT NOT SALES

Marcia McErlean, owner of a plant nursery in Staten Island, N. Y., had persistent electrical problems in her 1988 Jaguar almost from day she drove it home. Yet two years later, she bought a second Jag,

Jaguar. Scheele, one of the few Britons in Ford top management and a veteran of Ford's efficient Mexican operations, was handpicked by Chairman Harold A. Poling. His task: salvaging Ford's investment, which so far has been little short of disastrous. Hammered by the recession, Jaguar car sales have slipped by nearly half, and the company is piling up losses with no end in sight (chart).

Scheele, who needs to boost sales some 50% simply to break even, is stuck with two aging car models and no replacements due before late 1994. He must shepherd the company through its most ambitious new-product program ever. And he must convince consumers that Jaguar's dismal quality image has been

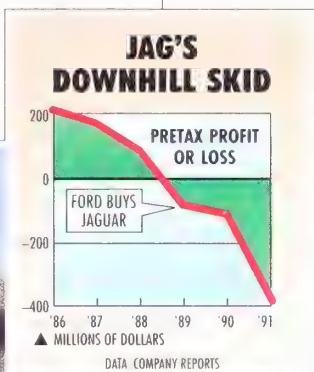
the first fruit will be an updated version of the \$45,000 XJ6 four-door sedan, with improved engine and a more rounded, aerodynamic exterior. Then, in 1996, comes a replacement for the XJS sports car. The current \$60,500 model dates back to 1976. But the biggest leap is planned for late 1998, when a new executive sedan—priced below the XJ6—is scheduled to go on sale. Under Ford's plan, that's the car that will boost Jaguar's volumes—and start producing megaprofits.

ROOF ON A HOT TIN CAT. Thanks to Scheele's predecessor, William J. Hayden, a tough-talking Ford veteran who spent his career in manufacturing, Jaguar already looks sleeker. Despite Jaguar's small size, Hayden says, its culture was stifling initiative. Marketing didn't talk to engineering, and managers were afraid to speak up. Hayden discovered what he calls "gross inefficiency and indiscipline in manufacturing." The break-even point, Hayden adds, "was higher than any number Jaguar had ever produced."

Now, it's a different Jaguar. After two years of hammering home Ford's quality message, Hayden reduced assembly-line defects by 80%. In the U.S., Jaguar says, warranty repairs on 1991 models were down by 15% from the year before and have fallen by 25% on

'92 models. Other improvements have helped boost productivity by 35%. And by linking with Ford to buy parts, Hayden has cut Jaguar's purchasing bill by 12%. But there's a long way to go. Hayden figures it still takes three times longer to assemble a Jaguar than a high-end Ford. One tiny example: A sunroof on a Jaguar takes 28 minutes to build, vs. 6 minutes at Ford.

Labor relations have also made a huge



BUILT IN 1976, THE AGING XJ6 SPORTS CAR WON'T BE REPLACED FOR FOUR MORE YEARS

use the dealer said the cars no longer had such problems and gave her a great deal—about \$40,000 for a model carrying a \$60,000 sticker price. Although the second car has had fewer problems, they're still too many for McErlean. "I wouldn't purchase another car," she says.

That's bad news for Nicholas V. Scheele. On Apr. 1, the tall, amiable 48-year-old moved into the driver's seat at

reversed. "We have to persuade people that there's a big difference from four or five years ago, that you don't need to buy two Jaguars because one's in the garage all the time," says Scheele.

The only way Jag will ever start spinning out money for Ford—and pay back its investment of \$3.5 billion and mounting—is with new products. None was in the works when Ford took over. But it quickly launched a design program, and

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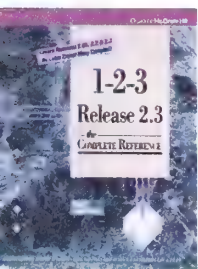
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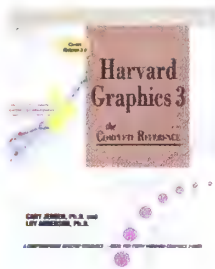
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The old Jaguar had been hampered by acrimonious management-labor relations and by restrictive work practices. When workers demanded their daily quotas, for example, they just stopped work. All that was swept away in a contract signed in 1990. "Our members have a new realization that they are the owners of the company, that customer satisfaction is inside the factory," says Chris Smeeth, a union leader.

Translating the factory gains into sales is another matter. In the U.S., where Jaguar sells about 40% of its output, competition is coming from a revitalized Detroit and new Japanese luxury marques. Lexus, Toyota Motor's luxury brand, sold more than four times as many cars as Jaguar in the U.S. last year. In-

Scheele says, Lexus is now "the competition."

Thanks to improved quality, Jaguar is now able to enter the fast-growing leasing business. For years, resale value of a Jag was much lower than on a comparable Mercedes-Benz. So if Jaguar matched Mercedes' per-month price on a lease, it would be stuck with a car worth less than a comparable Mercedes at the end of the lease. But Jaguar is now so confident that its new cars will hold their value that it started offering leases last year. Leasing now accounts for a quarter of its U.S. business.

APPEAL. Scheele forecasts a record in production this year to 27,500, up from just 23,000 last year—but far below the record 49,000 cars Jag produced in 1987. Still, even the reduced production point is about 35,000, which car executives admit won't be reached until 1994 at the earliest. But a crucial test will be the rollout of new models. "This company has never, ever launched anything on time," says Smeeth. The only new model introduced in the last decade was the XJ6, he adds, "and it was late and badly planned." With three model launches timed inside the next years, the potential trouble is huge.

In spite of Jaguar's problems, some analysts think Ford's imminent move may pay off. Jaguar has a mystique, a certain sex appeal, says Christopher Wedderburn, a senior consultant at Autodata Inc., a California firm. "A lot of people would like to own a Jag but have



SCHUELE: HEADING AN AMBITIOUS NEW-CAR PROGRAM

been reticent because of doubts about their reliability." If that can be taken care of, he adds, "I'm optimistic." Now all Scheele has to do is turn that dream into reality.

By Mark Marcum in London, with Thane Peterson and Lori Bongiorno in New York

SAAB: HALFWAY THROUGH A U-TURN

When David J. Herman walked into Saab's Trollhättan plant two years ago, he admits that he was "shocked." His bosses at General Motors had ponied up \$600 million for half of the Swedish luxury-car maker and parachuted him in as chief executive. He found Saab was taking 100 hours to build a car, labor turnover was a monstrous 25% a year, blue-collar absenteeism was a worrying 12% to 13% per day, and the company had lost \$300 million in 1989.

GM had just been outbid by Ford for

Britain's Jaguar. And to some critics, it looked as though GM was rushing to purchase a pig in a poke when it outbid Italy's Fiat and others to win the stake in Saab in December, 1989. These days, however, Herman has a good shot at bringing home the bacon.

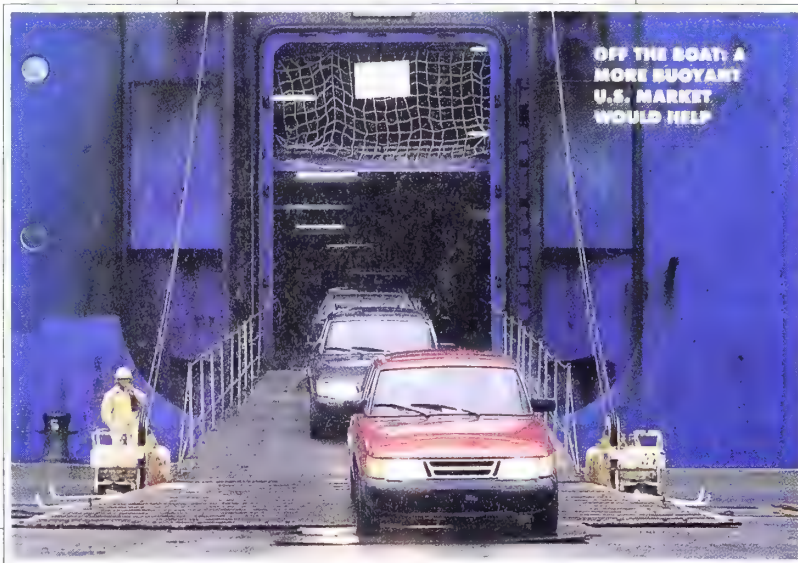
FUZZY IMAGE. Thanks to Herman's trimming, Saab can now make money producing just 100,000 cars a year, vs. the 200,000 needed in 1989. Labor turnover is down to 7%, absenteeism has been halved, and it now takes 50 to 60 hours to make a car. Such moves slashed Saab's pretax losses from \$770 million in 1990 to \$370 million last year, when it sold 87,500 cars. But the company is still forecasting losses in the \$80 million to \$160 million range this year.

Moving into the black will be tough as long as Saab's three biggest markets—the U.S., Sweden, and Britain—remain mired in recession. Even the greenback is working against Saab. Back in its glory days of 1987, when Saab sold 47,000 cars in the U.S., a dollar bought more than nine Swedish crowns. Today it buys just six crowns—equivalent to a 50% U.S. sticker-price hike in five years. All the same, Saab is aiming to sell 30,000 autos in the U.S. this year, up from 26,000 in 1991.

But critics say that Saab lacks a clear-cut image of quality or sportiness and urgently needs to roll out new products. A replacement for the 20-year-old Saab 900 series is set for late 1993, according to industry sources. That will be followed by a successor to the 9000 series and a new top-of-the-line car aimed at segments now dominated by Germany's BMW and Mercedes-Benz. Saab won't spell out the capital outlays involved in the rollouts, although they are a strain on its resources.

By Herman's own reckoning, Saab needs to make a car in no more than 40 hours to compete with the Europeans. With Japanese makers muscling into Europe, that may be the bare minimum. Even so, says Karl Ludvigsen, chairman of London-based consultants Ludvigsen Associates Ltd., "for the money, GM acquired a valuable property." It could turn out to be a better buy than Jaguar, not just a consolation prize.

By John Templeman in Bonn



BEAN COUNTERS OF THE RICH AND FAMOUS

The very rich have different accountants from you and me. Naturally, wealthy people are concerned about sheltering income, minimizing capital-gains taxes, and maximizing allowable deductions. But they face issues that ordinary wage slaves don't—and they have more to lose from poor tax planning.

That's where the super-CPA comes in. Instead of plugging numbers into a computerized 1040 once a year, accountants of the rich and famous can spend hundreds of hours helping their clients manage investments, save for retirement, organize trust funds, and draw up wills. "At this level," says William Brennan, head of Ernst & Young's Personal Financial Practice in Washington, "income tax planning, investment and compensation planning, and estate planning all go hand in hand." Often, the accountant consults regularly with a client's lawyer and portfolio manager or broker, monitoring the total financial picture on an ongoing basis.

COMPLICATED FUNDS. Who needs this kind of quarter-backing? It's less a matter of how much money you earn than of how you earn it. "If someone's making a hundred million a year all in a paycheck, his tax situation isn't that different from yours or mine," says Jeffrey Lubchansky, a New York City celebrity CPA whose clients have included Paul Anka and Bill Murray.

The real challenges come when people derive their wealth from a variety of sources and on an irregular basis. Business owners and the self-employed, highly compensated CEOs, heirs to a family fortune, and entertainers



are more likely to need a super-CPA than physicians or lawyers who, even when rich, have more predictable income streams. Unlike money managers, multipurpose accountants don't set minimums for their clients: The complexity of your finances, more than their sum, should determine whether you need extra help. In almost all cases, the

wealthy find their accountants through personal referrals. They often take their business to medium-size, regional accounting firms (table). The Big Six have also created special financial planning departments for high-net-worth clients. Despite their size and decentralization, the big firms try hard to develop personal relationships

with their wealthy customers.

The fees for such financial intimacy are all over the map. Some celebrities and athletes pay their business managers a fixed percentage of annual income for services that include tax planning. CPAs generally bill on an hourly basis. But hourly fees can range from \$50 to \$350, even within the same firm, depending on

ther a junior partner or head honcho takes your . When a client needs reg- consultations throughout year, most firms will slate their hourly rates an estimated monthly or terly retainer. Here, too, range is stupendous. A ll-business owner might just a few dollars a th to cover the occasional ne call, while a large, thly family can pay up to 00 a month for year-round ncial planning.

EMPY SHELTERS. If that ds steep, consider the su- CPA's juggling act. For thing, high-income people more likely to be subject he alternative minimum the flat 24% federal levy kicks in when Uncle Sam des that deductions or de- ciation reduce his take un- onably. Says Larry einfeld, a partner in KPMG Marwick's Personal Fi- cial Planning group: "u're always trying to age the client's affairs to h the breakeven point— e the regular tax and the e are equal—because you the higher of the two."

aycee Krysty, director of onal financial planning at s Adams in Seattle, calls AMT "the black hole of tax ning for high-net-worth iduals." Now that many shelters have been torn n and such deductions as ive losses have been elim- ed, income shifting and prepayment are among few ways left to avoid black hole. For example, choice between buying a ficate of deposit and a usury bill is the difference een current and deferred me: The T-bill doesn't pay interest until it matures. ilarly, people with large eas investments who get ificant foreign tax credits structure their portfolios maximize those credits in years they're needed t. Real estate investors get deductions by prepay- real estate taxes, and in nd gas, you get a current- deduction if you drill be- Dec. 31. Advising clients hen to make such moves

is part of the super-CPA's job.

For executives, an account- tant will help work out a de- ferred-compensation plan and advise clients on when they should take their bonuses or exercise stock options. Says Thomas Ross Jr., who heads Coopers & Lybrand's Personal Financial Services Practice in Parsippany, N. J.: "We ana-

says that for people with fluctuating in- comes, "it may be more cost-effective just to pay the penalty than to do tax planning four times a year." Accounting in- dustry groups are lobbying Congress to change the night- marish new requirement.

SOME SUPER-CPAs

The Big Six accounting firms all have departments serving high-net-worth clients. But many wealthy people use small- er, regional firms, usually recommended by word of mouth. Here's a select list of full-service, midsize accounting firms that provide tax compliance, financial advice, and estate planning for upper-income individuals and business owners. Fees are all over the map, depending upon the complexity of your financial needs and the seniority of the partner

Firm	Headquarters	Fees
ALTSCHULER, MELVOIN & GLASSER	Chicago	\$50-\$200/hr.
CLARFELD & CO.	New York	\$100-\$300/hr.
CROWE CHIZEK	South Bend, Ind.	\$40-\$130/hr.
EIDE HELMEKE	Fargo, N.D.	\$75-\$150/hr.
GOLDSTEIN, GOLUB, KESSLER	New York	\$1,000-\$30,000/yr.
GUMBINER, SAVETT, FRIEDMAN & ROSE	Santa Monica, Calif.	\$1,250-\$12,000/yr.
KRAFT BROS., ESSTMAN, PATTON & HARRELL	Nashville	\$60-\$250/hr.
MOSS ADAMS	Seattle	\$50-\$200/hr.

DATA: ACCOUNTING TODAY, BW

lyze the investment aspects of a company's stock option plan and combine it with tax goals. It's a complicated process."

The new rules on estimated quarterly tax payments have complicated the super-CPA's task further. Formerly, the

These CPAs oversee all financial aspects of a client's estate

self-employed could pay 100% of the prior year's income tax or 90% of projected current taxes, whichever was lower. Now, if income rises more than \$40,000, most such tax- payers must guess current taxes and fork over at least 90%. Moss Adams' Krysty

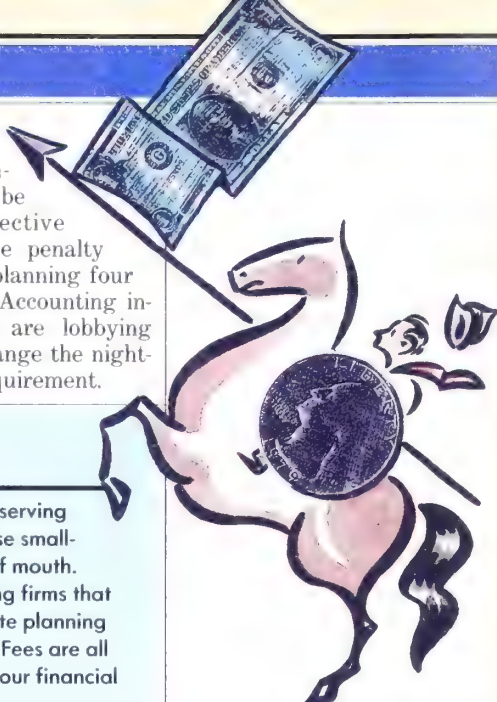
Accountants won't help you pick stocks, but they do give asset-allocation advice with an eye to tax consequences. Stanley Breitbard, Price Waterhouse's national director of personal financial services, says that his division will help structure investment portfolios based on a client's risk tolerance and age. Most super-CPAs will help decide, for example, what percentage of assets should be in fixed-in- come vehicles and then help choose between tax-exempt and taxable, government and corporate instruments.

SERIOUS BITE. Estate planning is another area where the wealthy need special help. With income taxes relatively low, the 55% federal estate tax is "the biggest tax in town," says Peat Marwick's Scheinfeld—and it applies to

any bequest over \$600,000. State and local taxes can boost the bite to 65% in some areas. A super-CPA works with lawyers in advising cli- ents on which assets to put in trust, how much life insur- ance to buy to help cover es- tate taxes, and how much charitable giving will help of- fet the government's take.

For a wealthy extended family, estate planning alone can be a full-time job. Says Wally Head, director of Ar- thur Andersen's Personal Fi- nancial Planning Practice: "We'll be sure there's a well- documented understanding of how individual plans fit to- gether for the whole family." He cites a three-generation family in Chicago that files 1,000 tax forms every year.

Because accountants don't take commissions, their role as all-around financial plan- ners is quietly growing. If you think you're in the mar- ket for a super-CPA, shop carefully. Commercial prepar- ers, who are not regulated by state or federal authorities, are rarely qualified to take on the taxes of the very wealthy. Some "enrolled agents," who must pass an IRS exam, can do a creditable job. In gen- eral, however, you will want a certified public accountant. And find a firm with which you'll feel comfortable in a long-term relationship: For the super-CPA, every day is Apr. 15. Joan Warner



Health

BEYOND LIVING WILLS: HEALTH CARE PROXIES

By signing a living will, many people have expressed their desire to refuse life-support measures in the event of an irreversible coma or terminal disease. But what happens if illness renders you incapable of making other decisions about your care? Much as a power of attorney lets you name a person to handle your financial affairs if you become incapacitated, a health care proxy lets you appoint someone to make medical decisions for you.

In just the last few years, health care proxies have been declared valid in 43 states, including some where physicians may not follow your wishes as expressed in a living will. Doctors find it more

difficult to disregard orders from a relative or friend armed with a health care proxy. For example, a daughter may determine that her mother, semiconscious with painkillers for incurable cancer, should not have to undergo additional surgery. Or a doctor may be told that an aged father, senile from Alzheimer's and bedridden with kidney failure, would prefer treatment with an experimental drug rather than dialysis. Appointing

one person to make such decisions saves time in emergencies and avoids family squabbles or confusion over what should be done.

ONE-PAGE FORM. As with a living will, a health care proxy should be drawn up well before it's needed. You can prepare one on a simple one-page form without a lawyer. Forms



are available from most state health departments or from Choice in Dying, 250 W. 57th St., New York, N.Y. 10107.

You merely identify one person who has the power to make decisions "for me when and if I become unable to make my own." The document can remain in effect indefinitely or expire at a time

determined by you beforehand. For instance, if your brother is made proxy, you might end his power when your son or daughter is mature enough to take over. A recent study by a Purdue University psychologist, Victor Cicirelli, found that "usually the elderly want their children to help them make decisions, or want to turn over decision-making to their children altogether."

Be sure to appoint an alternate proxy

case your first choice can't serve. And before naming anyone, discuss with them your thoughts on such topics as transfusions, shock therapy, and abortion, as well as artificial nutrition and hydration. Two witnesses—not including your proxy or alternate—should sign the form when you do. *Don Dunagan*

Investors who want to own stocks but don't like paying brokers' commissions can have the best of both worlds. About two dozen companies permit the public to buy stock directly from the corporation. In March, Exxon joined the list that includes Procter & Gamble and Kroger. Hundreds of corporations also sell stock as an offshoot of dividend reinvestment plans (DRIPs). Typically, investors with one share can qualify. At that, you can avoid brokerage fees by buying that first share via an investment club.

SECRETS. Stock-purchase programs have been well-kept secrets because brokers have little incentive to promote them. One useful source of companies that sell stock directly or through DRIPs is *Buying Stocks Without a Broker* by Charles B. Carlson (\$16.95, McGraw-Hill).

But before sending a

ELIMINATING THE MIDDLEMAN —YOUR BROKER

check, verify that the program still exists. "They come and go," says Sumie Kinoshita, editor of Evergreen Enterprises, a publisher of directories that tracks DRIPs. Also make sure the program is offered in your area. Central Vermont Public Service,

Smart Money

for example, sells shares in only 22 states.

Investors must make a minimum investment, which varies with the company. The plans differ in terms of the size of new investments and how often they can be made. It can be every quarter—or every week. Exxon and Centor Energy even let investors set up Individual Retirement Accounts that buy their stock.

The National Association of Investors Corp. (P.O. Box 220, Royal Oak, Mich., 48067) helps members buy stock through dividend-reinvestment plans without going through a broker for the initial shares. Members, who pay \$32

annual dues, can pick from among 90 companies that have agreed to let NAIC sell shares directly. Members pay \$5 for each company plan they enter. A broker would charge about \$35, says NAIC Chairman Thomas O'Hara. *The Moneypaper* (1010 Mamaroneck Ave., Mamaroneck, N.Y. 10543) helps subscribers buy the initial shares of some 400 companies for a \$15 or \$20 fee. Subscribers pay \$72 a year.

The disadvantage to stock-purchase plans is that you can't buy and sell shares whenever you want. Most companies invest shareholders' money only once a month. The same schedule usually applies for selling.

Given the trading limits, stock-purchase programs are best for small, long-term investors. Of course, just because a stock is available without a broker doesn't mean that it's worth owning. You still have to do your homework before jumping in. *Michele Galen*

COMPANIES SELLING STOCK DIRECTLY

Company	Initial investment/ maximum purchase
EXXON	\$250/\$8,000 per month
PROCTER & GAMBLE	One share/ \$120,000 per year
W.R. GRACE	\$50/\$100,000 per year
DUKE POWER	\$25/\$6,000 per quarter*
CITIZENS FIRST BANCORP	\$10/none

*Customers only

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Collecting

TIMEKEEPERS THAT IMPROVE WITH AGE

As collectibles go, old clocks are more than superb examples of the decorative arts. They're windows into social and technological history. With big clock and watch auctions coming up in New York at Christie's on Apr. 27 and Sotheby's on June 15, now is the time to learn more about these fascinating objects.

We take clocks for granted today. But in the great age of clockmaking, from the mid-17th through the 19th centuries, they were symbols of wealth, status, and education. "Our perspectives have changed so much," says Jonathan Snellenburg, an expert at Christie's. "In the 18th cen-

tury, only the very wealthy could afford or even understand a clock."

For a connoisseur such as Snellenburg, antique clocks are time capsules of the Industrial Revolution. British clockmaking hit its zenith in the 17th and 18th centuries just as England was gearing up to dominate world manufacturing. American clockmakers imported British movements until the early 19th century, when Eli Terry and others began mass-producing gears in Connecticut. By mid-century, the American industry had made such strides that it was exporting to Europe. The Connecticut makers pioneered manufacturing processes that paved the way for mass-production of automobiles a few decades later.

Some of the finest old clocks available for purchase can be found at Christie's semiannual sales. Pieces by such innovators as British maker George Graham and the French master Antide Janvier command top dollar. A Thomas Tompion clock from late 17th century Britain, for example, sold at Christie's in London for about \$1.5 million in 1989. The creations of famous jewelry houses such as Tiffany and Cartier also do well. A Cartier art deco clock hit the \$1.5 million mark last year at Christie's in New York.

CARRIAGE TRADE. But you don't have to pay enormous sums to get interesting clocks. Even at the major auctions, worthwhile pieces sometimes sell for under \$1,000—as much as you might pay for new clocks with little resale value. Many beginners start with mid-19th to early 20th century clocks by American manufacturers such as Seth Thomas, Ansonia, and Waterbury. "You can get a lot of these clocks in the \$200 range," says Tom Bartels, executive director of the National Association of Watch & Clock Collectors in Columbia,



AN 1800s' FRENCH TRAVEL CLOCK

Pa. (717 684-8261). The 37,000-member organization holds clock repair workshops and publishes a bimonthly bulletin listing regional meetings where collectors can get friendly advice and swap clocks.

Another good category for neophytes is carriage clocks, says Joe Fanelli,

owner of Fanelli Antique Timepieces in New York. Large-scale manufacture of these clocks began in Britain in the early 19th century. But the art hit its peak in France in the late 1800s. You can find simple examples of these early travel clocks for \$700 to \$800. Elaborate decoration and features such as grand sonnerie (striking the quarter hour) and moon dials can boost prices to several thousand dollars. According to Fanelli, another virtue of these clocks is that they are generally less than one foot high. "A collection does not take up your whole house," he says.

Collectors eventually graduate to more sophisticated models in the \$5,000-and-up range. The clocks most likely to appreciate in value are the cream of the pieces made by masters of their day. Even the best makers put out a lot of run-of-the-mill clocks along with a few, elaborate custom designs. Better clocks tend to

be weight-driven, rather than spring-driven, for greater accuracy. As with fine watches, the movements may be studded with sapphires or other jewels at rubbing points to cut down on friction. They may also have mercury-filled pendulums whose expansion and contraction help keep the clock on time when the temperature changes.

The precision timepieces known as regulators, which 19th century jewelers relied on to set other clocks, are particularly prized among the cognoscenti. So are caseless, skeletonized clocks that makers created to show off their skills. These are housed in glass domes to keep out the dust.

DIAL-SWITCHING. A with any major field of collecting, buying antique clocks can be treacherous. For example, signatures of famous makers have often been added to undistinguished pieces to inflate their worth. Then again, many valuable clocks are unsigned and can only be identified by arcane traits, such as the way a maker cut his gears.

Beware of marriages—movements and cases that don't match. To achieve its full value, a clock has to have its original case and movement. Evaluating a movement or even judging whether one is missing parts or needs cleaning requires the advice of a dealer or some other expert you can trust. *Stanley Reed*



A REGULATOR FROM HOWARD & DAVIS



A LATE 19TH CENTURY TIFFANY LONGCASE

Worth Noting

■ **MONEY MUSEUM.** On Apr. 28, Wall Street's Museum of American Financial History will move its exhibits from the old Customs House to its permanent quarters in the Standard Oil building at 24

Broadway. Call 212 908-4519.

■ **KID TAX TIP.** Late filers can invariably come out a bit ahead with separate returns for children under 14 who have more than \$1,100 of 1991 investment income. But if you use a tax preparer, check whether an extra return's cost voids any saving.

During The "Breaking In" Process Of Most Shoes, Exactly What Gets Broken In?

With most shoes
"breaking in"
is a painful process. Your
fragile foot fights against stiff
construction and generally
ungiving materials.

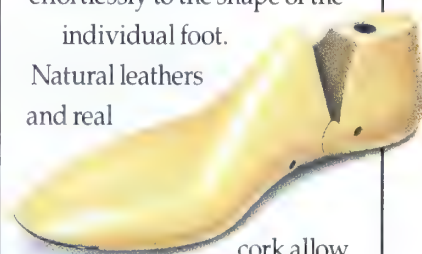
We start with our
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human

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called "lasts."
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lasts are sculptured to
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every contour.

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specific last, then crafted
entirely around it: The shoe's
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are pulled over the last tightly,
eliminating wrinkles
or bumps. The sole is attached
firmly to the bottom,
then worked until it reflects
each contour of the last.
This process gives the
shoe a footprint.



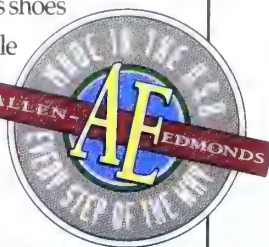
As it is worn, the shoe molds
effortlessly to the shape of the
individual foot.
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and real



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the foot to settle. In short, it is
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February 20, 1992

\$862,500,000



17,250,000 \$4.625 Depositary Shares Each Representing
1/10 Share of Series A Convertible Preferred Stock

(\$1.00 par value)

The First Boston Corporation

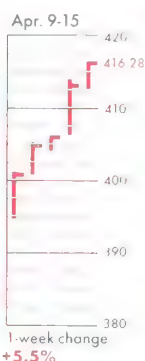
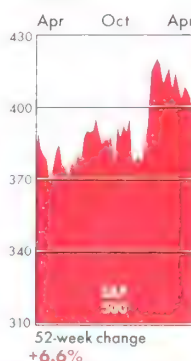
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Investment Figures of the Week

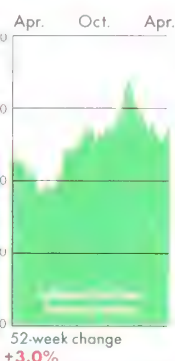
COMMENTARY

ulls are back. The Federal Reserve, trying to keep the recovery track, lowered the federal funds rate that triggered rallies in the financial markets. Also helping was better-than-expected earnings from IBM and Alcoa. On Apr. 14, Dow industrials made its first move above 3300 and climbed another 47.6 points the very next day. In stocks proved the biggest rally, up over 10%, as investors rewarded voters' decision to keep conservatives in power. Even beleaguered Tokyo market rallied.

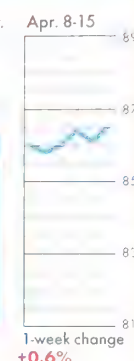
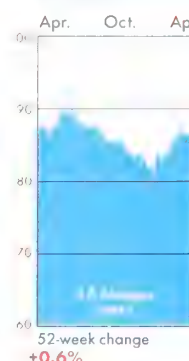
STOCKS



BONDS



THE DOLLAR



MARKET ANALYSIS

STOCKS

	Latest	% change Week	% change 52-week
DOW JONES INDUSTRIALS	3353.8	5.4	11.6
DOW JONES COMPANIES (Russell 1000)	220.1	5.4	7.9
DOW JONES COMPANIES (Russell 2000)	199.7	3.4	11.7
DOW JONES COMPANIES (Russell 3000)	234.6	5.3	8.1

FOREIGN STOCKS

	Latest	% change (local currency) Week	% change (local currency) 52-week
DOW JONES (FINANCIAL TIMES 100)	2640.2	10.3	3.7
DOW JONES (NIKKEI INDEX)	17,948.0	4.5	-33.5
DOW JONES (TSE COMPOSITE)	3411.3	2.8	-3.8

FUNDAMENTALS

	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.70%	3.95%	5.7%
30-YEAR TREASURY BOND YIELD	7.88%	7.92%	8.1%
S&P 500 DIVIDEND YIELD	3.08%	3.19%	3.3%
S&P 500 PRICE/EARNINGS RATIO	25.5	24.3	18.3

TECHNICAL INDICATORS

	Latest	Week ago	Reading
S&P 500 26-week moving average	401.3	400.5	Positive
Stocks above 26-week moving average	55.1%	50.6%	Negative
Speculative sentiment: Put/call ratio	0.42	0.45	Positive
Insider sentiment: Vickers sell/buy ratio	2.79	3.02	Negative

INDUSTRY GROUPS

4-WEEK LEADERS

	% change 4-week	% change 52-week
TELECOMMUNICATIONS	9.4	64.7
LONG-DISTANCE TELECOMMUNICATIONS	9.0	17.8
COMMODITIES	7.4	18.5
MINING	7.2	42.0
MARKET AUTO PARTS	6.8	80.9

4-WEEK LAGGARDS

	% change 4-week	% change 52-week
AIRLINES	-10.0	-3.9
BROKERAGE FIRMS	-9.8	23.8
SEMICONDUCTORS	-9.4	2.8
MECHANICAL ENGINEERING	-8.9	25.6
SPECIALTY APPAREL RETAILERS	-6.7	4.2

Strongest stock in group

	% change 4-week	% change 52-week	Price
MATTEL	13.5	78.5	36 3/4
AT&T	11.8	21.4	42 7/8
FORD MOTOR	8.3	30.2	41
CIRCUS CIRCUS ENTERPRISES	12.2	35.5	46
SPX	15.7	6.9	17 1/2

Weakest stock in group

	% change 4-week	% change 52-week	Price
USAIR GROUP	-15.7	-19.2	14 3/4
PAINWEBBER GROUP	-13.1	30.5	20 3/4
INTEL	-20.1	-3.7	52 1/4
KAUFMAN & BROAD HOME	-10.7	14.5	17 3/4
LIMITED	-10.8	-16.8	24 3/4

MUTUAL FUNDS

LEADERS

	4-week total return	%
FIDELITY INTL. EQ. INDEX EUROPEAN	4.6	
FIDELITY STRATEGIC EUROPEAN	4.2	
FIDELITY LATIN AMERICA GROWTH	4.1	

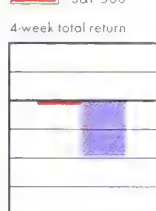
LAGGARDS

	4-week total return	%
DFA JAPANESE SMALL COMPANY	-15.3	
OPPENHEIMER GLOBAL BIO-TECH	-14.5	
FINANCIAL STRATEGIC ENVIRONMENTAL	-12.3	

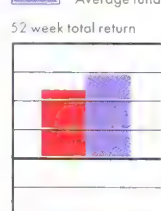
LEADERS

	52-week total return	%
DFA JAPANESE SMALL COMPANY	-37.1	
STRATEGIC GOLD/MINERALS	-35.8	
G. T. JAPAN GROWTH	-32.9	

LEADERS



LAGGARDS



RELATIVE PORTFOLIOS

For amounts sent the present of \$10,000 one year ago with portfolio

Treasury bonds
\$11,273
+0.37%

U. S. stocks
\$11,077
+1.68%

Money market fund
\$10,443
+0.07%

Gold
\$9,394
+0.15%

Foreign stocks
\$9,102
+2.19%

on this page are as of market close Wednesday, Apr. 15, 1992, unless otherwise indicated. The groups include S&P 500 companies only, performance and share prices are as of market close.

Apr. 14. Mutual fund returns are as of Apr. 10. Relative portfolios are valued as of Apr. 14. A more detailed explanation of this page is available on request.

JAPAN'S CHANCE FOR NEEDED REFORM

Suddenly, it looks a lot less like a miracle. Japan's stock market has crashed. Its economy is teetering on the brink of a recession brought on by tight money. Capital spending is falling, inventories are mounting, bankruptcies are at record levels, and bank capital is dwindling. Japanese companies are paying as much for investment capital as are companies anywhere else in the world (page 50). The issue is whether Japan will attack these problems in its traditional way, with a frenzied export drive, or whether it will make the needed changes in its domestic economic policies.

Japan's trade surplus for the fiscal year ended in March was \$88.55 billion, the second-highest on record. March's surplus of \$11 billion was 29.3% higher than the previous March and a record monthly high. If these trends continue, Japan is sure to be heading for even greater frictions with its trading partners. If Tokyo wants to play a constructive role on the world stage, this is not a good way to start.

Japan's surplus doesn't stem from a clique of bureaucrats, politicians, and industrialists scheming to take the country's problems out on the rest of the world. It is embedded in a system that has routinely put producer interests before those of consumers. Unless that changes, Japanese industry has little choice but to seek growth elsewhere.

There's much talk of fiscal stimulus for Japan, but so far, its policymakers haven't acted. The government budget is in surplus, so there's plenty of room for pump-priming. Tokyo, however, is sticking to the same kind of modest measures it has used in the past. The problem is that they aren't working this time, leaving poor prospects for growth.

It is clearly time for Japan to recognize the need for fundamental change in policy. It should stress consumption over production. It should spend more on housing and infrastructure. It should reform land use and bring down consumer prices by cutting the complexity of its distribution system. In the past, Japan has pursued healthy change in the face of crisis. It now has a chance to do so again.

MAJOR'S VICTORY: THE KICK THE EC NEEDED?

The tremors were still reverberating across the British Isles from the shocking election victory by the Conservatives when Neil Kinnock resigned four days later as leader of the Labor Party. On the same day, Apr. 13, an earthquake knocked goods off the shelves of stores in Maasricht, the Netherlands, where the European nations had pledged themselves on Dec. 11, 1991, to common economic, social, and foreign policies by 1999. That earthquake may prove symbolic, because John Major's upset victory may be just what Britain and Europe need to jolt them out of their recent political and economic malaise (page 34).

The Tory win should boost business confidence by strengthening the forces that favor free markets in Europe. This Conservative Prime Minister is likely to disprove the conventional wisdom that a Labor victory would hasten Britain's integration into Europe while the Tories would slow it down. A consummate pragmatist, Major recognizes that Britain's best bet to escape the second tier is to mesh its economy with those on the Continent. With a belt under his belt, he will no longer be so much bound by Margaret Thatcher's insular ideology.

As it happens, Britain will have the presidency of the European Community for the last half of this year. Major can be expected to use this opportunity to raise Britain's profile in the EC and shape the European unity drive more to his liking. Unlike Labor, which favors a highly regulated, high wage Europe, Major wants economic integration without creating a menacing, new central government bureaucracy in Brussels. In espousing this view, he already has an ally in German Chancellor Helmut Kohl, and he may have another in France's new Prime Minister, Pierre Berégovoy, a financial disciplinarian who just replaced Edith Cresson, a champion of state industry.

BRINGING SANITY TO AIR FARES

The airline industry is trying to bring some sense, and profitability, to what has been a chaotic fare policy. Some carriers have had as many as a dozen different fares for a single flight. If all the carriers follow the lead of American Airlines, that number will be cut to four (page 40). The change will simplify decisions for the flying public and the airlines hope, bolster profits.

Under the new pricing schemes, fares for unrestricted tickets—the kind many business travelers use—will be cut substantially. In fact, in some cases they'll be close enough to discount fares that—the airlines hope—business travelers particularly those ineligible for bargain-basement negotiated corporate fares, will opt for the slightly higher unrestricted fares instead of the discounts. Business travelers also for the first time would have to pay a fee, in this case \$25, for changing plans. The combination could help the airlines' bottom line without costing business too much.

Vacationers could benefit as well. Though some of their fares may go up, they could have more flexibility than in the past. Under the new scheme, a schedule change can now be had for \$25.

Bringing order to airline fares won't be easy. The industry's history under deregulation has been punctuated by fare wars. The airlines have used computers to calculate their seat prices to maximize revenues and passenger volume—attempting to wring every last nickel out of each flight. But fare wars and the recession undermined this effort to boost profitability, while consumers were left dissatisfied. The danger is that the weaker airlines could be hurt thus lessening competition and pushing up prices on routes left with fewer carriers. With that caveat, simpler fares are surely worth a try.

